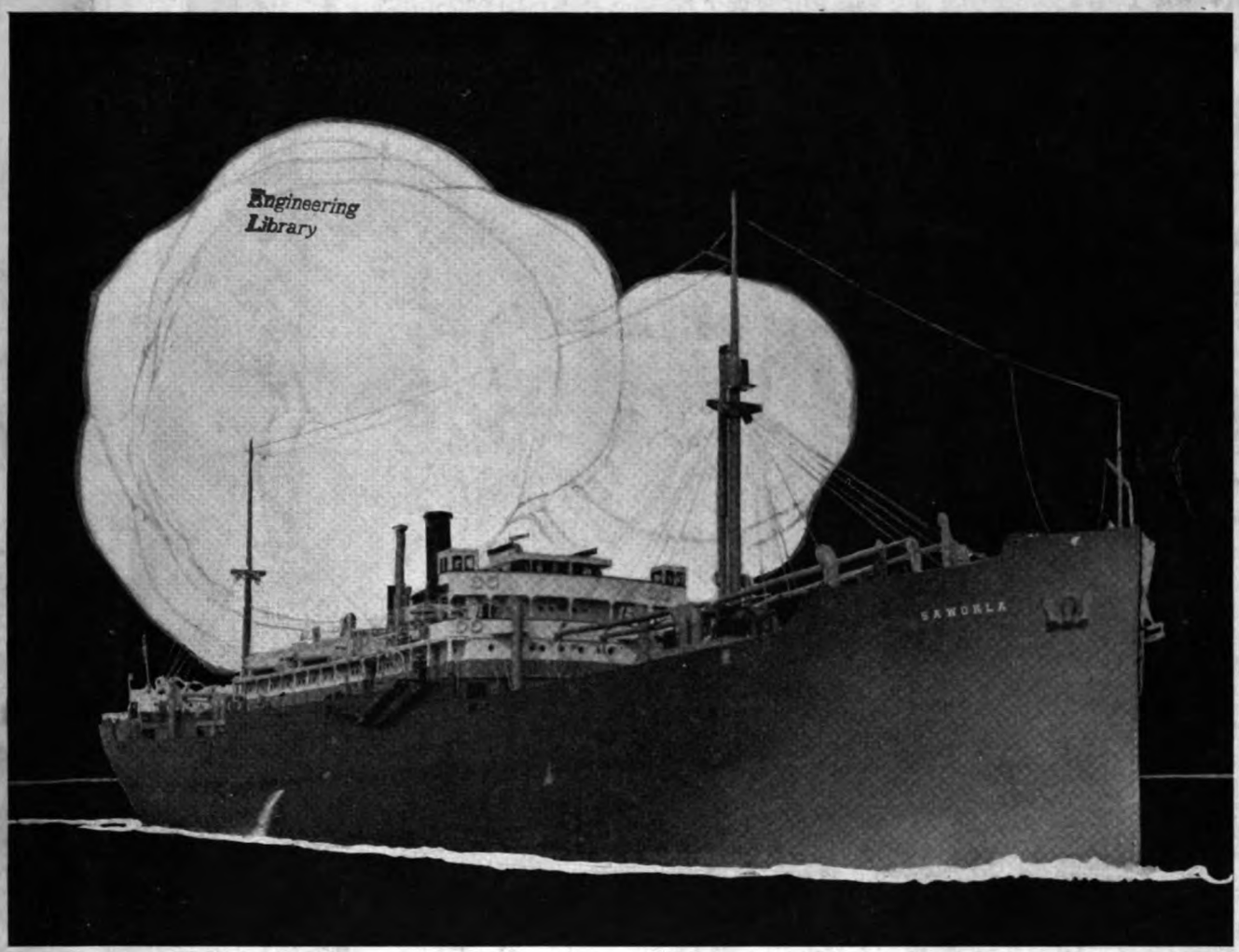
JANUARY, 1928

Marine Engineering

and Shipping Age



UTILIZING OBSOLETE WAR STEAMERS

RECONDITIONED-DIESELIZED-SPEEDED UP

Now Comparable with Latest Built
Motor Freight Vessels of the World

"SAWOKLA" "CITY OF DALHART"
"YOMACHICHI" "CITY OF RAYVILLE"

BUSCH-SULZER MOTORSHIPS

BUSCH-SULZER BROS.—DIESEL ENGINE CO., ST. LOUIS, MO.

Generated on 2024-09-12 14:14 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Bessemer powered Towboat "Tornado"

Bessemer Diesel Power Plant in the "Tornado"

Bessemer powered Tanker "Sunoco"

Tanker or Towboat

FROM bed plate to reversing mechanism Bessemer Diesels are built to meet all conditions exactly. They are rugged in construction, readily accessible, easy to operate and understand, and economical in fuel and lubricating oil.

There's a Bessemer Marine Diesel of the proper size for every marine requirement—for tanker, towboat, tug, fishing vessel, dredge, yacht and auxiliary generating sets.

For main power units there are Bessemers from 60 H. P. to 1500 H. P. and Bessemer Diesel auxiliaries are built from 35 K. W. up, either for auxiliary work or electric propulsion.

Thousands of Bessemer Diesel horsepower in every kind of marine service are proving the statement *"You buy the best when you buy a Bessemer"*.

THE BESSEMER GAS ENGINE COMPANY
Lincoln Avenue ∴ ∴ ∴ Grove City, Pa.

BESSEMER
DIESEL ENGINES

Vol. XXXIII **No. 1**

Published Monthly by Simmons-Boardman Publishing Co., 30 Church St., New York, N. Y. Subscription price, United States, Mexico and Canada, $3.00; foreign countries, $4.00 a year; single copy 35 cents. Entered at New York, N. Y., as second-class matter.

Generated on 2024-09-12 14:14 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

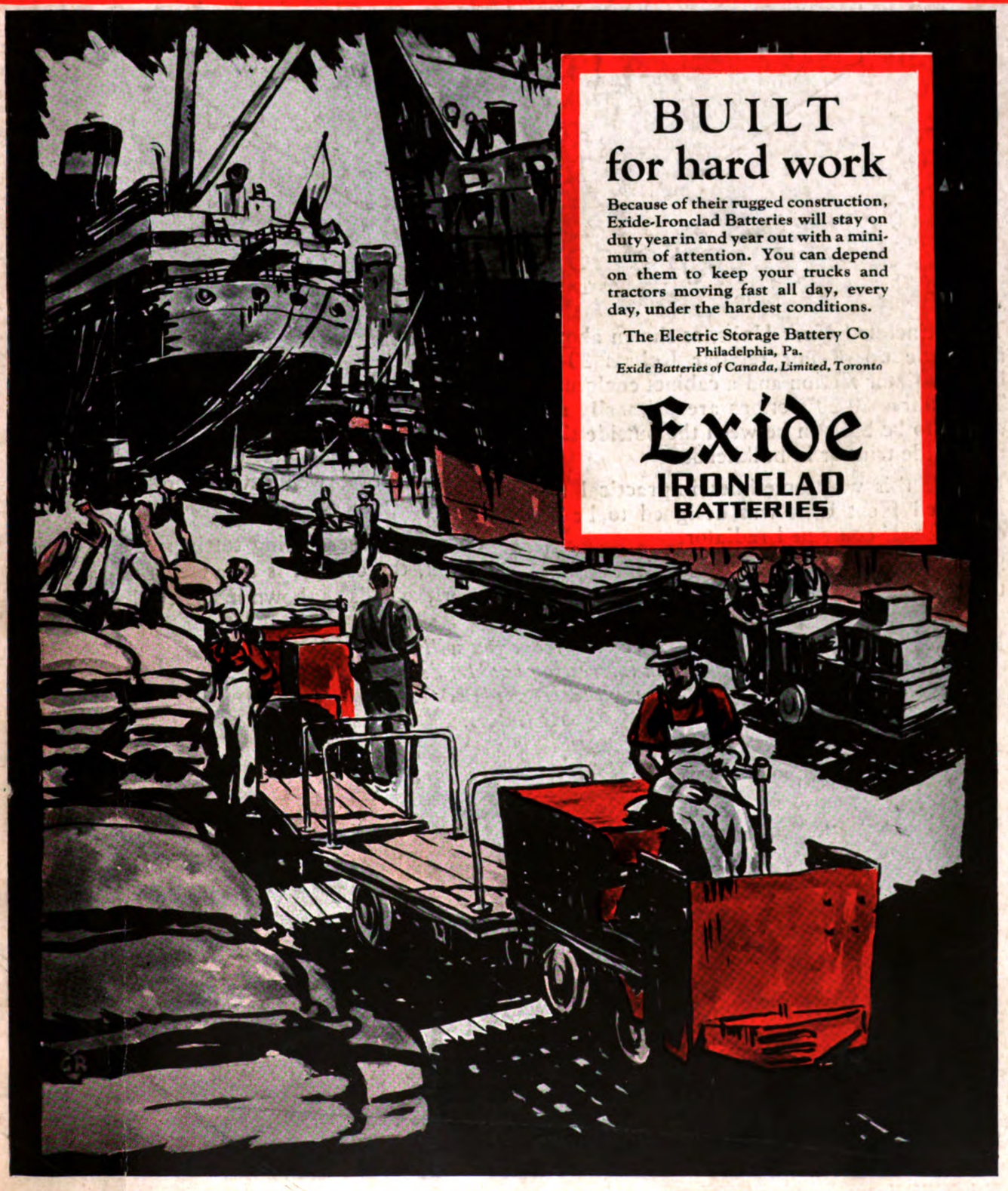
Digitized by Google

Original from UNIVERSITY OF MICHIGAN

FEB 15 1928

FEBRUARY, 1928

Marine Engineering and Shipping Age


BUILT
for hard work
Because of their rugged construction, Exide-Ironclad Batteries will stay on duty year in and year out with a minimum of attention. You can depend on them to keep your trucks and tractors moving fast all day, every day, under the hardest conditions.
The Electric Storage Battery Co
Philadelphia, Pa.
Exide Batteries of Canada, Limited, Toronto
Exide
IRONCLAD
BATTERIES

Generated on 2024-09-12 14:15 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

TRADE PUBLICATIONS

CENTRIFUGAL AIR COMPRESSORS.—Small multi-stage centrifugal air compressors are described in a bulletin issued by the General Electric Company, Schenectady, New York.

MARINE GOVERNING DEVICE.—A device known as the participating marine governor for the purpose of preventing the racing of propellers in heavy seas by the control of reciprocating marine engines, is described in a folder issued by the Participating Marine Governor Company of Oakland, Cal. This device is an invention of W. C. Dennis of Oakland, Cal.

OXYGEN JET CUTTING MACHINE.—A tool designed for the efficient, accurate and speedy cutting and shaping of steel, mild steel, chrome nickel steel, manganese steel, cast steel and wrought iron, has been developed by the Hubar-Jones Corporation, New York. A complete description and use of this device is contained in a catalogue now being issued by this company.

MARINE LUBRICANTS.—Special marine lubricants for auxiliary equipment on ships is the subject of a pamphlet issued by the Vacuum Oil Company, New York. This pamphlet contains a brief description of each type of lubricant for use in such installations as ice machines, gyro-compasses, dynamos, telemotor steering gear, spring tunnel bearings, engine and pump bearings, winches and the like.

MACHINING ALLOY STEEL.—This treatise on alloy steels was prepared by Thomas H. Wickenden of the development and research department of the International Nickel Company, New York. The conclusions reached in this bulletin are that under properly controlled shop practice nickel steels will machine more readily than carbon or other alloy steels of the same tensile strength.

BURMEISTER AND WAIN DIESEL ENGINES AND MOTORSHIPS.—Burmeister and Wain, Ltd., Copenhagen, Denmark, has issued two catalogues, one under the title of "Some facts about the Burmeister and Wain Diesel Engines and Motorships" and the second devoted to "A Complete Description of the Diesel Ferry Korsor," which is the largest combined passenger, train and motor car ferry in the world.

TURBINE GENERATOR UNITS.—The Westinghouse Electric and Manufacturing Company, South Philadelphia works, has recently released a bulletin entitled "Direct Connected Turbine Generator Units With Capacity of 5, 7½, 10 and 15 Kilowatts." These units are designed for 125 and 250 volt current operation. A number of illustrations are given showing the construction and operation of these turbine units.

CENTRIFUGAL PUMPS. — Centrifugal pumps and their types, designs and uses, form the subject of an illustrated book distributed by the De Laval Steam Turbine Company, Trenton, N. J. The centrifugal pump, in the past 25 years, has reached a high degree of refinement. Separate chapters of the present work take up the requirements of pumps for general water service, power plant service, water works service, sewage and irrigation pumping, supplying high pressure water to elevators and hydraulic machinery, marine service, mine pumping, fire protection service, hot water heating and brine circulation service, handling oils and paper pulp, etc. The final chapter treats of pump characteristic curves and gives formulae and constants useful to the pump user.

FEED WATER HEATERS.—Bulletin 119, prepared by the Foster Wheeler Corporation, New York, deals with hot water heating systems of the forced circulation type employing exhaust steam from the power plant as the source of heat. This bulletin contains photographs taken in nationally known plants and will indicate to the power plant engineers exactly how this system applies to the modern heating system.

ELECTRIC DRIVE FOR SHIP PROPULSION. —In its annual review of developments in the electrical field under the title "Engineering Achievements of the Westinghouse Electric and Manufacturing Company for the Year 1927," a section is devoted to marine transportation. In this section a general statement is made of the application of electric drive to both naval and merchant vessels as well as the auxiliary uses of electricity including radio communication, lighting, heating and cooking, and the like. A list of ships for which electrically propelled machinery was ordered during the year includes: Two turbo-electric drive ferryboats for the Key System Transit Company, San Francisco, Cal.; two Diesel-electric ferryboats for the Golden Gate Ferry Company, San Francisco; equipment for a Diesel-electric tanker, which will later be built by the Standard Oil Company of California, and five turbo-electric Coast Guard cutters.

BUSINESS NOTES

Norman F. Kimball has been appointed manager of advertising of the American-LaFrance and Foamite Corporation, a combination of the American-LaFrance Fire Engine Company and Foamite-Childs Corporation, Utica, New York.

The Foster Wheeler Corporation, New York, opened an office on December 1 at 109 Tchoupitoulas Street, New Orleans, La., with H. W. Parsons, formerly assistant marine manager in the company's New York office, in charge. This office will handle the company's business in the Gulf district, up the Mississippi River as far as St. Paul, up the Missouri River as far as Kansas City and up the Ohio River as far as Cincinnati.

Fisher and Maier, naval architects and marine engineers, have opened an office in the Forrest building at 119 South Fourth street, Philadelphia, Pa., for the purpose of designing, surveying and supervising new and repair work in the marine field. Both Mr. Fisher and Mr. Maier have until recently been connected with the William Cramp and Sons Ship and Engine Building Company, Philadelphia, Mr. Fisher as general manager and Mr. Maier as assistant general manager of the Kensington Shipyard, which was the repair department of the Cramp Company. Both members of this firm have had 30 years' experience in all branches of shipbuilding and repair work.

Marine Societies

America

American Marine Association. 30 Church St., New York. President—Col. E. A. Simmons.

American Marine Standards Committee. Chairman, Colonel E. A. Simmons. Secretary, A. V. Bouillon, Division of Simplified Practice, Department of Commerce, Washington, D. C.

American Society of Marine Designers. Secretary—B. G. Barnes, 202 Kendrick Ave., Quincy, Mass.

American Society of Marine Engineers. 605 Market St., San Francisco, Calif. President—Henry F. Gelhaus. Secretary—Wm. H. Thille.

American Society of Naval Engineers. Navy Department, Washington, D. C. Secretary-Treasurer—Commander H. B. Hird, U. S. N., Bureau of Engineering, Navy Department, Washington, D. C.

American Steamship Owners' Association. 11 Broadway, New York. President—H. B. Walker.

Atlantic Coast Shipbuilders' Association. 1600 Walnut Street, Philadelphia, Pa. Secretary—C. S. King.

Council of American Shipbuilders, Inc., 50 Broadway, New York. President—Homer L. Ferguson. Secretary-Treasurer—Henry C. Hunter.

Jersey Marine Club, 4th and River streets, Hoboken, N. J. President—Mason F. Grymes.

Lake Carriers' Association. President—J. S. Ashley. Secretary—George A. Marr, Rockefeller Building, Cleveland, O.

National Association of Engine and Boat Manufacturers. 29 West 39th Street, New York City. Secretary—Ira Hand.

National Association of Masters, Mates and Pilots. National Secretary—M. D. Tenniswood, 308 Vine St., Camden, N. J.

National Marine Engineers' Beneficial Association. Headquarters, 311-315 Machinists Building, Washington, D. C. President—Wm. F. Yates. Secretary—Albert L. Jones.

National Merchant Marine Association. Munsey Bldg., Washington, D. C. President—Hon. J. E. Ransdell.

Neptune Association. 21 Pearl St., New York City. Secretary-Treasurer—Captain John F. Milliken.

New York and New Jersey Dry Dock Association, 111 Broadway, New York. President—Jonathan Moore.

Ocean Association of Marine Engineers. 15 Whitehall St., New York. Secretary—Bert L. Todd.

Port of New York Authority. 75 West Street, New York. Chairman—George S. Silzer. Secretary—Wilson J. Vance.

Society of Naval Architects and Marine Engineers. 29 West 39th Street, New York. Secretary and Treasurer—Daniel H. Cox.

The Maritime Association of the Port of New York. 78 Broad St., New York City. President—John Dowd. Secretary—John F. Manning.

The New York Tow Boat Exchange. 11 Moore St., New York. Manager—Langdon W. Smith.

The Propeller Club of the Port of New York. President—Harry W. Parsons, 111 Broadway, New York. Secretary—W. Z. Gardner, 136 Liberty street, New York.

United States Naval Institute. Naval Academy, Annapolis, Md. Secretary and Treasurer—Captain H. A. Baldridge, U. S. N.

United States Ship Operators' Association. 149 Broadway, New York. President—Winchester Noyes.

Canada

Grand Council N. A. of M. E. of Canada. Grand Secretary-Treasurer—W. A. MacDonald, 62 Albert St., Halifax, N. S.

Great Britain

Institute of Marine Engineers, Incorporated. 85/88 The Minories, London, E.1.

Institution of Engineers and Shipbuilders in Scotland. 39 Elmbank Crescent, Glasgow.

Institution of Naval Architects. 5 Adelphi Terrace, London, W. C.

North East Coast Institution of Engineers and Shipbuilders. Bolbec Hall, Westgate Road, Newcastle-on-Tyne.

France

Association Technique Maritime et Aéronautique. Secrétariat Général—7, rue de Madrid, Paris (8e).

Italy

Collegio Degli Ingegneri Naval e Meccanici in Italia.

Generated on 2024-09-12 14:18 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

FEB 15 1928

FEBRUARY, 1928

Marine Engineering and Shipping Age

BUILT
for hard work
Because of their rugged construction, Exide-Ironclad Batteries will stay on duty year in and year out with a minimum of attention. You can depend on them to keep your trucks and tractors moving fast all day, every day, under the hardest conditions.
The Electric Storage Battery Co
Philadelphia, Pa.
Exide Batteries of Canada, Limited, Toronto
Exide
IRONCLAD
BATTERIES

Generated on 2024-09-12 14:17 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

TRADE PUBLICATIONS

CENTRIFUGAL AIR COMPRESSORS.—Small multi-stage centrifugal air compressors are described in a bulletin issued by the General Electric Company, Schenectady, New York.

MARINE GOVERNING DEVICE.—A device known as the participating marine governor for the purpose of preventing the racing of propellers in heavy seas by the control of reciprocating marine engines, is described in a folder issued by the Participating Marine Governor Company of Oakland, Cal. This device is an invention of W. C. Dennis of Oakland, Cal.

OXYGEN JET CUTTING MACHINE.—A tool designed for the efficient, accurate and speedy cutting and shaping of steel, mild steel, chrome nickel steel, manganese steel, cast steel and wrought iron, has been developed by the Hubar-Jones Corporation, New York. A complete description and use of this device is contained in a catalogue now being issued by this company.

MARINE LUBRICANTS.—Special marine lubricants for auxiliary equipment on ships is the subject of a pamphlet issued by the Vacuum Oil Company, New York. This pamphlet contains a brief description of each type of lubricant for use in such installations as ice machines, gyro-compasses, dynamos, telemotor steering gear, spring tunnel bearings, engine and pump bearings, winches and the like.

MACHINING ALLOY STEEL.—This treatise on alloy steels was prepared by Thomas H. Wickenden of the development and research department of the International Nickel Company, New York. The conclusions reached in this bulletin are that under properly controlled shop practice nickel steels will machine more readily than carbon or other alloy steels of the same tensile strength.

BURMEISTER AND WAIN DIESEL ENGINES AND MOTORSHIPS.—Burmeister and Wain, Ltd., Copenhagen, Denmark, has issued two catalogues, one under the title of "Some facts about the Burmeister and Wain Diesel Engines and Motorships" and the second devoted to "A Complete Description of the Diesel Ferry Korsor," which is the largest combined passenger, train and motor car ferry in the world.

TURBINE GENERATOR UNITS.—The Westinghouse Electric and Manufacturing Company, South Philadelphia works, has recently released a bulletin entitled "Direct Connected Turbine Generator Units With Capacity of 5, 7½, 10 and 15 Kilowatts." These units are designed for 125 and 250 volt current operation. A number of illustrations are given showing the construction and operation of these turbine units.

CENTRIFUGAL PUMPS. — Centrifugal pumps and their types, designs and uses, form the subject of an illustrated book distributed by the De Laval Steam Turbine Company, Trenton, N. J. The centrifugal pump, in the past 25 years, has reached a high degree of refinement. Separate chapters of the present work take up the requirements of pumps for general water service, power plant service, water works service, sewage and irrigation pumping, supplying high pressure water to elevators and hydraulic machinery, marine service, mine pumping, fire protection service, hot water heating and brine circulation service, handling oils and paper pulp, etc. The final chapter treats of pump characteristic curves and gives formulae and constants useful to the pump user.

FEED WATER HEATERS.—Bulletin 119, prepared by the Foster Wheeler Corporation, New York, deals with hot water heating systems of the forced circulation type employing exhaust steam from the power plant as the source of heat. This bulletin contains photographs taken in nationally known plants and will indicate to the power plant engineers exactly how this system applies to the modern heating system.

ELECTRIC DRIVE FOR SHIP PROPULSION. —In its annual review of developments in the electrical field under the title "Engineering Achievements of the Westinghouse Electric and Manufacturing Company for the Year 1927," a section is devoted to marine transportation. In this section a general statement is made of the application of electric drive to both naval and merchant vessels as well as the auxiliary uses of electricity including radio communication, lighting, heating and cooking, and the like. A list of ships for which electrically propelled machinery was ordered during the year includes: Two turbo-electric drive ferryboats for the Key System Transit Company, San Francisco, Cal.; two Diesel-electric ferryboats for the Golden Gate Ferry Company, San Francisco; equipment for a Diesel-electric tanker, which will later be built by the Standard Oil Company of California, and five turbo-electric Coast Guard cutters.

BUSINESS NOTES

Norman F. Kimball has been appointed manager of advertising of the American-LaFrance and Foamite Corporation, a combination of the American-LaFrance Fire Engine Company and Foamite-Childs Corporation, Utica, New York.

The Foster Wheeler Corporation, New York, opened an office on December 1 at 109 Tchoupitoulas Street, New Orleans, La., with H. W. Parsons, formerly assistant marine manager in the company's New York office, in charge. This office will handle the company's business in the Gulf district, up the Mississippi River as far as St. Paul, up the Missouri River as far as Kansas City and up the Ohio River as far as Cincinnati.

Fisher and Maier, naval architects and marine engineers, have opened an office in the Forrest building at 119 South Fourth street, Philadelphia, Pa., for the purpose of designing, surveying and supervising new and repair work in the marine field. Both Mr. Fisher and Mr. Maier have until recently been connected with the William Cramp and Sons Ship and Engine Building Company, Philadelphia, Mr. Fisher as general manager and Mr. Maier as assistant general manager of the Kensington Shipyard, which was the repair department of the Cramp Company. Both members of this firm have had 30 years' experience in all branches of shipbuilding and repair work.

Marine Societies

America

American Marine Association. 30 Church St., New York. President—Col. E. A. Simmons.

American Marine Standards Committee. Chairman, Colonel E. A. Simmons. Secretary, A. V. Bouillon, Division of Simplified Practice, Department of Commerce, Washington, D. C.

American Society of Marine Designers. Secretary—B. G. Barnes, 202 Kendrick Ave., Quincy, Mass.

American Society of Marine Engineers. 605 Market St., San Francisco, Calif. President—Henry F. Gelhaus. Secretary—Wm. H. Thille.

American Society of Naval Engineers. Navy Department, Washington, D. C. Secretary-Treasurer—Commander H. B. Hird, U. S. N., Bureau of Engineering, Navy Department, Washington, D. C.

American Steamship Owners' Association. 11 Broadway, New York. President—H. B. Walker.

Atlantic Coast Shipbuilders' Association. 1600 Walnut Street, Philadelphia, Pa. Secretary—C. S. King.

Council of American Shipbuilders, Inc., 50 Broadway, New York. President—Homer L. Ferguson. Secretary-Treasurer—Henry C. Hunter.

Jersey Marine Club, 4th and River streets, Hoboken, N. J. President—Mason F. Grymes.

Lake Carriers' Association. President—J. S. Ashley. Secretary—George A. Marr, Rockefeller Building, Cleveland, O.

National Association of Engine and Boat Manufacturers. 29 West 39th Street, New York City. Secretary—Ira Hand.

National Association of Masters, Mates and Pilots. National Secretary—M. D. Tennis-wood, 308 Vine St., Camden, N. J.

National Marine Engineers' Beneficial Association. Headquarters, 311-315 Machinists Building, Washington, D. C. President—Wm. F. Yates. Secretary—Albert L. Jones.

National Merchant Marine Association. Munsey Bldg., Washington, D. C. President—Hon. J. E. Ransdell.

Neptune Association. 21 Pearl St., New York City. Secretary-Treasurer—Captain John F. Milliken.

New York and New Jersey Dry Dock Association, 111 Broadway, New York. President—Jonathan Moore.

Ocean Association of Marine Engineers. 15 Whitehall St., New York. Secretary—Bert L. Todd.

Port of New York Authority. 75 West Street, New York. Chairman—George S. Silzer. Secretary—Wilson J. Vance.

Society of Naval Architects and Marine Engineers. 29 West 39th Street, New York. Secretary and Treasurer—Daniel H. Cox.

The Maritime Association of the Port of New York. 78 Broad St., New York City. President—John Dowd. Secretary—John F. Manning.

The New York Tow Boat Exchange. 11 Moore St., New York. Manager—Langdon W. Smith.

The Propeller Club of the Port of New York. President—Harry W. Parsons, 111 Broadway, New York. Secretary—W. Z. Gardner, 136 Liberty street, New York.

United States Naval Institute. Naval Academy, Annapolis, Md. Secretary and Treasurer—Captain H. A. Baldridge, U. S. N.

United States Ship Operators' Association. 149 Broadway, New York. President—Winchester Noyes.

Canada

Grand Council N. A. of M. E. of Canada. Grand Secretary-Treasurer—W. A. MacDonald, 62 Albert St., Halifax, N. S.

Great Britain

Institute of Marine Engineers, Incorporated. 85/88 The Minories, London, E.1.

Institution of Engineers and Shipbuilders in Scotland. 39 Elmbank Crescent, Glasgow.

Institution of Naval Architects. 5 Adelphi Terrace, London, W. C.

North East Coast Institution of Engineers and Shipbuilders. Bolbec Hall, Westgate Road, Newcastle-on-Tyne.

France

Association Technique Maritime et Aéronautique. Secrétariat Général—7, rue de Madrid, Paris (8e).

Italy

Collegio Degli Ingegneri Naval e Meccanici in Italia.

Generated on 2024-09-12 14:14 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

FEB 15 1928

FEBRUARY, 1928

Marine Engineering and Shipping Age

BUILT
for hard work
Because of their rugged construction, Exide-Ironclad Batteries will stay on duty year in and year out with a minimum of attention. You can depend on them to keep your trucks and tractors moving fast all day, every day, under the hardest conditions.
The Electric Storage Battery Co
Philadelphia, Pa.
Exide Batteries of Canada, Limited, Toronto
Exide
IRONCLAD
BATTERIES

Generated on 2024-09-12 14:16 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

TRADE PUBLICATIONS

CENTRIFUGAL AIR COMPRESSORS.—Small multi-stage centrifugal air compressors are described in a bulletin issued by the General Electric Company, Schenectady, New York.

MARINE GOVERNING DEVICE.—A device known as the participating marine governor for the purpose of preventing the racing of propellers in heavy seas by the control of reciprocating marine engines, is described in a folder issued by the Participating Marine Governor Company of Oakland, Cal. This device is an invention of W. C. Dennis of Oakland, Cal.

OXYGEN JET CUTTING MACHINE.—A tool designed for the efficient, accurate and speedy cutting and shaping of steel, mild steel, chrome nickel steel, manganese steel, cast steel and wrought iron, has been developed by the Hubar-Jones Corporation, New York. A complete description and use of this device is contained in a catalogue now being issued by this company.

MARINE LUBRICANTS.—Special marine lubricants for auxiliary equipment on ships is the subject of a pamphlet issued by the Vacuum Oil Company, New York. This pamphlet contains a brief description of each type of lubricant for use in such installations as ice machines, gyro-compasses, dynamos, telemotor steering gear, spring tunnel bearings, engine and pump bearings, winches and the like.

MACHINING ALLOY STEEL.—This treatise on alloy steels was prepared by Thomas H. Wickenden of the development and research department of the International Nickel Company, New York. The conclusions reached in this bulletin are that under properly controlled shop practice nickel steels will machine more readily than carbon or other alloy steels of the same tensile strength.

BURMEISTER AND WAIN DIESEL ENGINES AND MOTORSHIPS.—Burmeister and Wain, Ltd., Copenhagen, Denmark, has issued two catalogues, one under the title of "Some facts about the Burmeister and Wain Diesel Engines and Motorships" and the second devoted to "A Complete Description of the Diesel Ferry Korsor," which is the largest combined passenger, train and motor car ferry in the world.

TURBINE GENERATOR UNITS.—The Westinghouse Electric and Manufacturing Company, South Philadelphia works, has recently released a bulletin entitled "Direct Connected Turbine Generator Units With Capacity of 5, 7½, 10 and 15 Kilowatts." These units are designed for 125 and 250 volt current operation. A number of illustrations are given showing the construction and operation of these turbine units.

CENTRIFUGAL PUMPS. — Centrifugal pumps and their types, designs and uses, form the subject of an illustrated book distributed by the De Laval Steam Turbine Company, Trenton, N. J. The centrifugal pump, in the past 25 years, has reached a high degree of refinement. Separate chapters of the present work take up the requirements of pumps for general water service, power plant service, water works service, sewage and irrigation pumping, supplying high pressure water to elevators and hydraulic machinery, marine service, mine pumping, fire protection service, hot water heating and brine circulation service, handling oils and paper pulp, etc. The final chapter treats of pump characteristic curves and gives formulae and constants useful to the pump user.

FEED WATER HEATERS.—Bulletin 119, prepared by the Foster Wheeler Corporation, New York, deals with hot water heating systems of the forced circulation type employing exhaust steam from the power plant as the source of heat. This bulletin contains photographs taken in nationally known plants and will indicate to the power plant engineers exactly how this system applies to the modern heating system.

ELECTRIC DRIVE FOR SHIP PROPULSION. —In its annual review of developments in the electrical field under the title "Engineering Achievements of the Westinghouse Electric and Manufacturing Company for the Year 1927," a section is devoted to marine transportation. In this section a general statement is made of the application of electric drive to both naval and merchant vessels as well as the auxiliary uses of electricity including radio communication, lighting, heating and cooking, and the like. A list of ships for which electrically propelled machinery was ordered during the year includes: Two turbo-electric drive ferryboats for the Key System Transit Company, San Francisco, Cal.; two Diesel-electric ferryboats for the Golden Gate Ferry Company, San Francisco; equipment for a Diesel-electric tanker, which will later be built by the Standard Oil Company of California, and five turbo-electric Coast Guard cutters.

BUSINESS NOTES

Norman F. Kimball has been appointed manager of advertising of the American-LaFrance and Foamite Corporation, a combination of the American-LaFrance Fire Engine Company and Foamite-Childs Corporation, Utica, New York.

The Foster Wheeler Corporation, New York, opened an office on December 1 at 109 Tchoupitoulas Street, New Orleans, La., with H. W. Parsons, formerly assistant marine manager in the company's New York office, in charge. This office will handle the company's business in the Gulf district, up the Mississippi River as far as St. Paul, up the Missouri River as far as Kansas City and up the Ohio River as far as Cincinnati.

Fisher and Maier, naval architects and marine engineers, have opened an office in the Forrest building at 119 South Fourth street, Philadelphia, Pa., for the purpose of designing, surveying and supervising new and repair work in the marine field. Both Mr. Fisher and Mr. Maier have until recently been connected with the William Cramp and Sons Ship and Engine Building Company, Philadelphia, Mr. Fisher as general manager and Mr. Maier as assistant general manager of the Kensington Shipyard, which was the repair department of the Cramp Company. Both members of this firm have had 30 years' experience in all branches of shipbuilding and repair work.

Marine Societies

America

American Marine Association. 30 Church St., New York. President—Col. E. A. Simmons.

American Marine Standards Committee. Chairman, Colonel E. A. Simmons. Secretary, A. V. Bouillon, Division of Simplified Practice, Department of Commerce, Washington, D. C.

American Society of Marine Designers. Secretary—B. G. Barnes, 202 Kendrick Ave., Quincy, Mass.

American Society of Marine Engineers. 605 Market St., San Francisco, Calif. President—Henry F. Gelhaus. Secretary—Wm. H. Thille.

American Society of Naval Engineers. Navy Department, Washington, D. C. Secretary-Treasurer—Commander H. B. Hird, U. S. N., Bureau of Engineering, Navy Department, Washington, D. C.

American Steamship Owners' Association. 11 Broadway, New York. President—H. B. Walker.

Atlantic Coast Shipbuilders' Association. 1600 Walnut Street, Philadelphia, Pa. Secretary—C. S. King.

Council of American Shipbuilders, Inc., 50 Broadway, New York. President—Homer L. Ferguson. Secretary-Treasurer—Henry C. Hunter.

Jersey Marine Club, 4th and River streets, Hoboken, N. J. President—Mason F. Grymes.

Lake Carriers' Association. President—J. S. Ashley. Secretary—George A. Marr, Rockefeller Building, Cleveland, O.

National Association of Engine and Boat Manufacturers. 29 West 39th Street, New York City. Secretary—Ira Hand.

National Association of Masters, Mates and Pilots. National Secretary—M. D. Tennis-wood, 308 Vine St., Camden, N. J.

National Marine Engineers' Beneficial Association. Headquarters, 311-315 Machinists Building, Washington, D. C. President—Wm. F. Yates. Secretary—Albert L. Jones.

National Merchant Marine Association. Munsey Bldg., Washington, D. C. President—Hon. J. E. Ransdell.

Neptune Association. 21 Pearl St., New York City. Secretary-Treasurer—Captain John F. Milliken.

New York and New Jersey Dry Dock Association, 111 Broadway, New York. President—Jonathan Moore.

Ocean Association of Marine Engineers. 15 Whitehall St., New York. Secretary—Bert L. Todd.

Port of New York Authority. 75 West Street, New York. Chairman—George S. Silzer. Secretary—Wilson J. Vance.

Society of Naval Architects and Marine Engineers. 29 West 39th Street, New York. Secretary and Treasurer—Daniel H. Cox.

The Maritime Association of the Port of New York. 78 Broad St., New York City. President—John Dowd. Secretary—John F. Manning.

The New York Tow Boat Exchange. 11 Moore St., New York. Manager—Langdon W. Smith.

The Propeller Club of the Port of New York. President—Harry W. Parsons, 111 Broadway, New York. Secretary—W. Z. Gardner, 136 Liberty street, New York.

United States Naval Institute. Naval Academy, Annapolis, Md. Secretary and Treasurer—Captain H. A. Baldridge, U. S. N.

United States Ship Operators' Association. 149 Broadway, New York. President—Winchester Noyes.

Canada

Grand Council N. A. of M. E. of Canada. Grand Secretary-Treasurer—W. A. MacDonald, 62 Albert St., Halifax, N. S.

Great Britain

Institute of Marine Engineers, Incorporated. 85/88 The Minories, London, E.1.

Institution of Engineers and Shipbuilders in Scotland. 39 Elmbank Crescent, Glasgow.

Institution of Naval Architects. 5 Adelphi Terrace, London, W. C.

North East Coast Institution of Engineers and Shipbuilders. Bolbec Hall, Westgate Road, Newcastle-on-Tyne.

France

Association Technique Maritime et Aéronautique. Secrétariat Général—7, rue de Madrid, Paris (8e).

Italy

Collegio Degli Ingegneri Naval e Meccanici in Italia.

Generated on 2024-09-12 15:02 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Engineering
Library

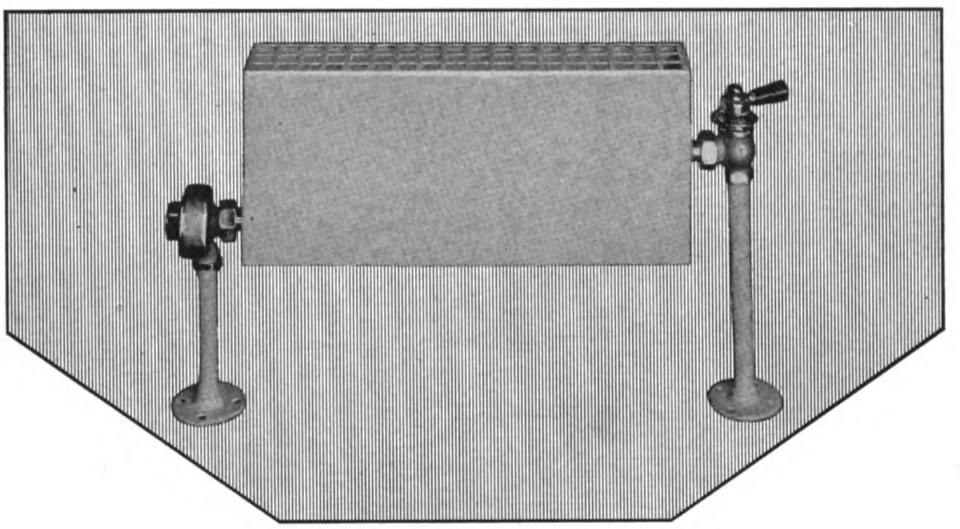
FEB 15 1928

FEBRUARY, 1928

Marine Engineering and Shipping Age

BUILT
for hard work
Because of their rugged construction, Exide-Ironclad Batteries will stay on duty year in and year out with a minimum of attention. You can depend on them to keep your trucks and tractors moving fast all day, every day, under the hardest conditions.
The Electric Storage Battery Co
Philadelphia, Pa.
Exide Batteries of Canada, Limited, Toronto
Exide
IRONCLAD
BATTERIES

Generated on 2024-09-12 14:16 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from
UNIVERSITY OF MICHIGAN



ROBRAS 20-20 RADIATORS

These Enclosed Heat Units, as shown above, are made up of our regular Robras 20-20 brass radiator section and a cabinet enclosure. The Robras 20-20 sections are primarily designed to be built in between the outside skin and inside trim or in bulkheads.

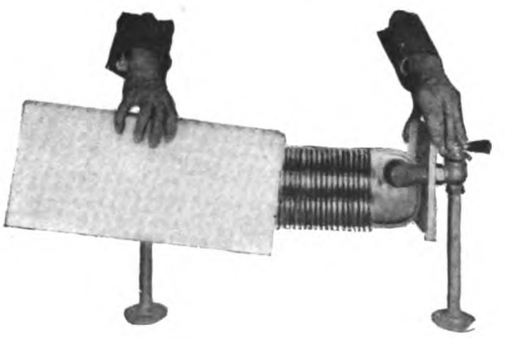
Because this was sometimes impractical the Enclosed Heat Unit was designed to be an efficient self contained radiator.

Small in size, because of their efficient design, the radiators give off as much heat as a cast iron five times as large and five times as heavy.

These units come in six sizes ranging from five to twenty-one square feet of radiating surface. The dimensions vary from three by eighteen and one-quarter inches to five and one-half by twenty-two and one-quarter inches.

To permit them being set in space of small height, the cabinet is arranged to be slid on over the ends as shown in the cut below.

A request from you will bring an interesting booklet describing these Robras 20-20 Radiators.



ROME BRASS RADIATOR
CORPORATION
1 East 42nd Street, New York City

Vol. XXXIII No. 2
Published monthly by Simmons-Boardman Publishing Company, 34 North Crystal Street, East Stroudsburg, Pa. Application made for entry of the second class at the post office at East Stroudsburg, Pa., January 14, 1928, under the act of March 3, 1879.

Generated on 2024-09-12 14:14 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

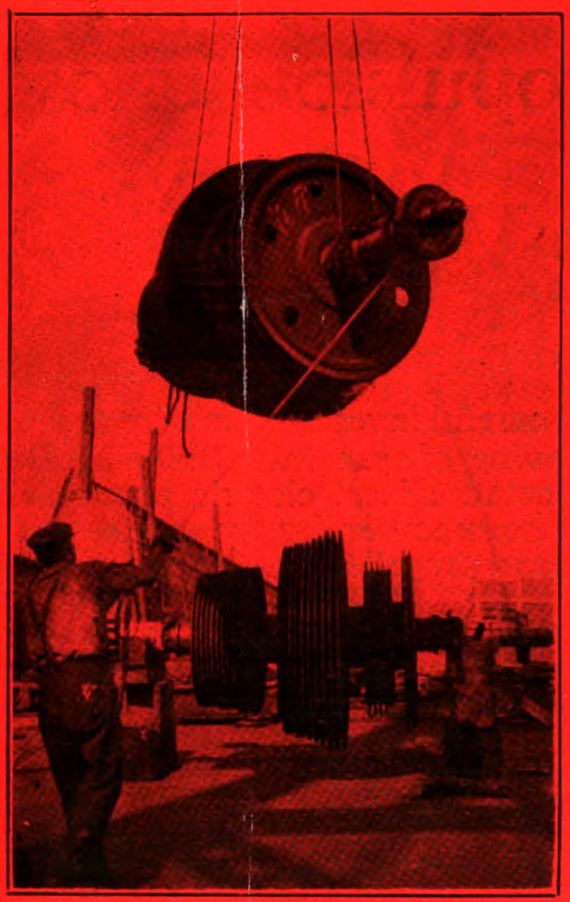
MAR 16 1928

MARCH, 1928

Marine Engineering and Shipping Age

Turbine Specialists

"There Is No Substitute For Experience"



Rebladed During Vessel's Usual Stay in Port
L. P. Turbines of Atlantic Liner

OUR ORGANIZATION

has been built upon the accumulated knowledge of many years' experience.

WE ARE EQUIPPED TO REBLADE YOUR LARGEST BREAKDOWN IN 4 TO 10 DAYS

ALL OUR WORK

is done in accordance with the latest and best turbine practice.

WE CARRY THE LARGEST STOCK OF PARSONS BLADING IN U. S. A.

WE MAKE BLADES

For all types of turbines.

TURBINE REPAIRS MADE IN ANY PORT

telephone or wire us.

We Are Also Equipped to Handle All Classes of Voyage Repairs

Capstaff-Hunter Turbine Works

Incorporated

MARINE ENGINEERS, BOILER MAKERS, SHIP REPAIRERS

HOBOKEN, N. J., PORT OF NEW YORK

Generated on 2024-09-12 14:52 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Hendrickson, chief engineer; Wm. Henderson, master. S. S. *Aquarius* (3), F. Fredrickson, (3), chief engineer; W. H. Stone, master.

Struthers & Barry.—S. S. *Dilworth*, R. G. Ramsey, chief engineer; K. I. Hogstrom, master

Texas Star Line.—S. S. *Chester Valley* (1), R. Scott, chief engineer; C. T. McMains, master. S. S. *Cliffwood* (3), I. Birks (1), chief engineer; N. L. Proctor, master. S. S. *Cody* (2), E. S. Rasmussen, chief engineer; E. J. Madden, master. S. S. *Conness Peak*, Thomas Jerret, chief engineer; C. P. Townsend, master. S. S. *Westmoreland* (1), P. Thompson (1), chief engineer; J. V. Smith, master. S. S. *Endicott* (1), R. S. Hendrickson, chief engineer; W. M. Henderson, master. S. S. *Waban*, H. Grotemat, chief engineer; J. W. Blackwood, master.

United States Lines.—S. S. *Leviathan* (5), J. J. Fagan (5), chief engineer; H. Hartley, master. S. S. *Republic* (2), A. W. Styron (2), chief engineer; A. B. Randall, master.

Yankee Line.—S. S. *Scattle Spirit*, E. H. Draper, chief engineer; G. V. Hedman, master.

Honorable Mention

American Australia Orient Line.—S. S. *West Calera*, H. George, chief engineer; H. Hansen, master. S. S. *West Nivaria*, R. E. George, chief engineer; H. N. Krog, master. S. S. *Elkridge*, E. Troski, chief engineer; J. T. Flynn, master. S. S. *West Chopaka*, E. C. Matheson, chief engineer; C. H. Bruun, master.

American Diamond Lines.—S. S. *Western Ally*, G. Poortvliet, chief engineer; E. W. Carver, master. S. S. *Bellepline*, J. S. Bishop, chief engineer; S. F. Ing, master. S. S. *Wytheville*, J. A. Bruno, chief engineer; J. T. Hokinson, master.

American Dixie Lines.—S. S. *West Hobomac*, C. A. Adams, chief engineer; C. H. Hewlett, master. S. S. *Duquesne*, L. V. LeBeuf, chief engineer; G. D. Tipton, master. S. S. *Cripple Creek*, C. M. Fredrickson, chief engineer; J. P. Forrest, master. S. S. *Abercos*, C. Anderson, chief engineer; O. H. Olsen, master.

American India Line.—S. S. *Egremont*, J. E. Turpin, chief engineer; D. Holt, master.

American Merchant Lines.—S. S. *City of Flint*, E. Kearney, chief engineer; T. Thomassen, master.

American Palmetto Line.—S. S. *Cold Water*, E. J. Riggs, chief engineer; A. C. Forward, master.

American Pioneer Line.—S. S. *The Lambs*, W. H. Zigler, chief engineer; S. C. Fenn, master. S. S. *Eclipse*, E. J. Brenson, chief engineer; D. A. Smith, master. S. S. *Independence*, J. Stawicke, chief engineer; J. L. Jones, master. S. S. *Ethan Allen*, E. H. Knee, chief engineer; A. C. Iverson, master. S. S. *Liberator*, N. Johnson, chief engineer; C. D. Smith, master.

American Premier Line.—S. S. *West Hobomac*, C. A. Adams, chief engineer; C. H. Hewlett, master.

American Republics Line.—S. S. *St. Anthony*, H. P. Saxe, chief engineer; C. B. Delaney and A. P. Spaulding, masters. M. S. *Tampa*, W. C. Dowe, chief engineer; P. P. Taylor, master.

American West African Line.—S. S. *West Nohno*, E. L. Johnson, chief engineer; E. W. Meese, master. S. S. *Cathlamet*, F. B. Auld chief engineer; R. S. Sparrow, master.

Gulf West Mediterranean Line.—S. S. *West Chatala*, S. T. Pritchett, chief engineer; I. M. Holt, master.

Mississippi Valley European Line.—S. S. *Carplaka*, A. Isaacson, chief engineer; H. P. Smith, master. S. S. *Cold Brook*, W. H. Evans, chief engineer; H. Fahrenwald, master. S. S. *Cranford*, P. J. Battam, chief engineer; G. H. Steel, master.

Mobile Oceanic Line.—S. S. *Maiden Creek*, P. Calagez, chief engineer; E. L. Wheadon, master.

Oriole Lines.—S. S. *Coelleda*, L. Henkel, chief engineer; C. Hillyer, master. S. S. *West Nosska*, C. Rice, chief engineer; E. W. Hickey, master. S. S. *Clairton*, J. D. Sylvester, chief engineer; J. M. Dunn, master.

Southern States Line.—S. S. *City of Fairbury*, L. J. Swift, chief engineer; A. A. Colbury and G. H. Johnson, masters. S. S. *Saguache*, C. J. Spatz, chief engineer; E. Simpson, master. S. S. *Youngstown*, C. Crosier, chief engineer; Albin Johnson, master. S. S. *Effna*, A. L. Rosamond, chief engineer; H. S. Olsen, master. S. S. *Oakwood*, C. Walters, chief engineer; H. Ward, master. S. S. *Bayou Chico*, B. Trachtenburg, chief engineer; R. B. Armstrong, master. S. S. *City of Weatherford*, F. C. Gouner, chief engineer; J. P. Haarberg, master. S. S. *Emergency Aid*, F. S. Jurkowski, chief engineer; M. Cameron, master.

Texas Star Line.—S. S. *West Quechee*, C. M. Cobb, chief engineer; George Skene, master. S. S. *Youngstown*, C. Crosier, chief engineer; Albin Johnson, master.

United States Lines.—S. S. *George Washington*, W. G. Grace, chief engineer; H. Cunningham, master.

Yankee Line.—S. S. *West Pool*, R. H. Phinney, chief engineer; L. F. Thompson, master. S. S. *West Campgaw*, E. Innes, chief engineer; F. E. Hardy, master. S. S. *Lorain*, J. E. Miller, chief engineer; J. M. Caulk, master.

TRADE PUBLICATIONS

MOTORSHIP LALANDIA.—Burmeister and Wain, Ltd., Copenhagen, Denmark, has issued a catalogue devoted to a complete description of the 7,500-ton twin screw motorship *Lalandia* for the East Asiatic Company.

ELECTRICAL INSTRUMENTS.—The fourth edition of the general catalogue for the Weston Electrical Instrument Corporation of Newark, N. J., has been distributed to the marine field and contains descriptions of many devices of interest to marine engineers.

WHITE METALS AND BABBITT.—A. pamphlet has been issued by I. Shonberg, Inc., Brooklyn, N. Y., on white metals and babbitt, their origin, history and progress as well as the various alloys of such antifriction metals and contains data and information of interest to marine engineers.

FLEXIBLE METALLIC AND SEMI-METALLIC PACKINGS.—This bulletin distributed by the Flex Alloy Packing Company of Philadelphia contains a brief description of its standard and special packings. The product is put up in convenient forms of coils, spiral spool, ring and reel and has a feature of being made of finely drawn alloy wire, insulated, lubricated with graphite then woven and formed into triangular sections. Two sections are bound together with a closely woven cover.

CALENDAR.—A calendar has been issued by the Moran Towing and Transportation Company, Inc., of New York. Included in this calendar is a tide table for the locations of Sandy Hook, Governor's Island and Hell Gate Light.

DIESEL YACHTS.—The firm of Cox and Stevens, naval architects, New York, sent out a New Year's greeting in the form of a pamphlet illustrating and describing nine Diesel yachts that are now under construction from plans developed by the firm.

GASKETS.—A folder with price lists has been published by the Flexitallic Gasket Company of Camden, N. J. A description of the product shows that it is partially metal and asbestos, constructed in a flexible manner and applicable to pipe flanges, tube caps and manholes.

FILTERS FOR RECONDITIONING OILS.—The United Filters Corporation of Hazleton, Pa., has distributed a bulletin describing the type O. R. Kelly pressure filter which may be adopted by users of Diesel and other internal combustion engines for reconditioning crank case and other engine oils.

OXY-ACETYLENE WELDING.—The Air Reduction Sales Company, New York, has recently issued a reprint of a paper presented at the annual fall meeting of the American Welding Society. This paper entitled, "A Study of Oxy-acetylene Welding as Applied to Light Gage Pressure Containers" and written by H. J. Grow deals with the various methods of setting up work, the difficulties and solutions of the problems encountered in welding tanks.

Marine Societies

America

American Marine Association. 30 Church St., New York. President—Col. E. A. Simmons.

American Marine Standards Committee. Chairman, Colonel E. A. Simmons. Secretary, A V. Bouillon, Division of Simplified Practice, Department of Commerce, Washington, D. C.

American Society of Marine Designers. Secretary—B. G. Barnes, 202 Kendrick Ave., Quincy, Mass.

American Society of Marine Engineers. 605 Market St., San Francisco, Calif. President—Henry F. Gelhaus. Secretary—Wm. H. Thille.

American Society of Naval Engineers. Navy Department, Washington, D. C. Secretary-Treasurer—Commander H. B. Hird, U. S. N., Bureau of Engineering, Navy Department, Washington, D. C.

American Steamship Owners' Association. 11 Broadway, New York. President—H. B. Walker.

Atlantic Coast Shipbuilders' Association. 1600 Walnut Street, Philadelphia, Pa. Secretary C. S. King.

Council of American Shipbuilders, Inc. 50 Broadway New York. President—Homer L. Ferguson. Secretary-Treasurer—Henry C. Hunter.

Jersey Marine Club. 4th and River Streets, Hoboken, N. J. President—Col. Bartlett.

Lake Carriers' Association. President—J. S. Ashley. Secretary—George A. Marr, Rockefeller Building, Cleveland, O.

National Association of Engine and Boat Manufacturers. 29 West 39th Street, New York City. Secretary—Ira Hand.

National Association of Masters, Mates and Pilots. National Secretary—M. D. Tenniswood, 308 Vine St., Camden, N. J.

National Marine Engineers' Beneficial Association. Headquarters 311-315 Machinists Building, Washington D. C. President—Wm. F. Yates. Secretary—Albert L. Jones.

Neptune Association. 21 Pearl St., New York City. Secretary-Treasurer—Captain John F. Milliken.

New York and New Jersey Dry Dock Association, 111 Broadway, New York. President—Jonathan Moore.

Ocean Association of Marine Engineers. 15 Whitehall St., New York. Secretary—Bert L. Todd.

Port of New York Authority. 75 West Street, New York. Chairman—George S. Silzer. Secretary—Wilson J. Vance.

Society of Naval Architects and Marine Engineers. 29 West 39th Street, New York. Secretary and Treasurer—Daniel H. Cox.

The Maritime Association of the Port of New York. 78 Broad St., New York City. President—John Dowd. Secretary—John F. Manning.

The New York Tow Boat Exchange. 11 Moore St., New York. Manager—Langdon W. Smith.

The Propeller Club of the Port of New York. President—Harry W. Parsons, 111 Broadway, New York. Secretary—W. Z. Gardner, 136 Liberty Street, New York.

United States Naval Institute. Naval Academy, Annapolis, Md. Secretary and Treasurer—Captain H. A. Baldridge, U. S. N.

United States Ship Operators' Association. 149 Broadway, New York. President—Winchester Noyes.

Canada

Grand Council N. A. of M. E. of Canada. Grand Secretary-Treasurer—W. A. MacDonald, 62 Albert St., Halifax, N. S.

Great Britain

Institute of Marine Engineers, Incorporated. 85/88 The Minories, London, E.1.

Institution of Engineers and Shipbuilders in Scotland. 39 Elmbank Crescent, Glasgow.

Institution of Naval Architects. 5 Adelphi Terrace, London, W. C.

North East Coast Institution of Engineers and Shipbuilders. Bolbec Hall, Westgate Road, Newcastle-on-Tyne.

France

Association Technique Maritime et Aéronautique. Secrétariat Général—7, rue de Madrid, Paris (8e).

Italy

Collegio Degli Ingegneri Naval e Meccanici in Italia.

Generated on 2024-09-12 14:15 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

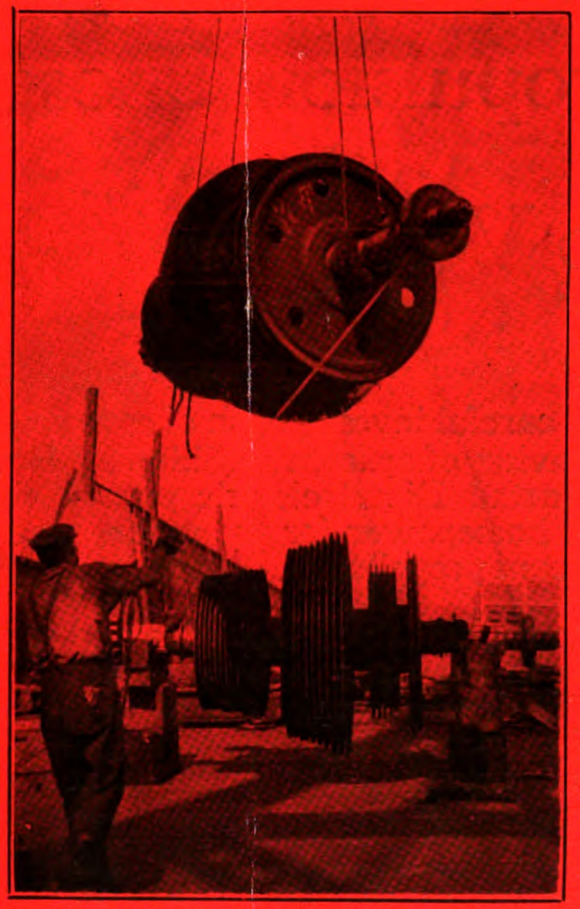
MAR 16 1928

MARCH, 1928

Marine Engineering and Shipping Age

Turbine Specialists

"There Is No Substitute For Experience"



Rebladed During Vessel's Usual Stay in Port
L. P. Turbines of Atlantic Liner

OUR ORGANIZATION

has been built upon the accumulated knowledge of many years' experience.

WE ARE EQUIPPED TO REBLADE YOUR LARGEST BREAKDOWN IN 4 TO 10 DAYS

ALL OUR WORK

is done in accordance with the latest and best turbine practice.

WE CARRY THE LARGEST STOCK OF PARSONS BLADING IN U. S. A.

WE MAKE BLADES

For all types of turbines.

TURBINE REPAIRS MADE IN ANY PORT

telephone or wire us.

We Are Also Equipped to Handle All Classes of Voyage Repairs

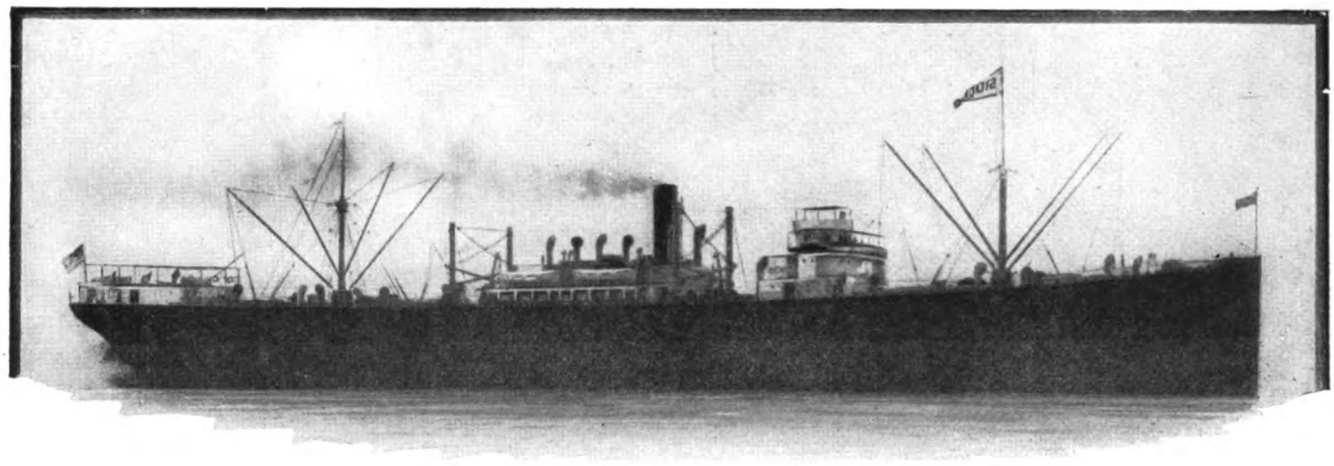
Capstaff-Hunter Turbine Works

Incorporated

MARINE ENGINEERS, BOILER MAKERS, SHIP REPAIRERS

HOBOKEN, N. J., PORT OF NEW YORK

Generated on 2024-09-12 14:14 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



S. S. Triumph

Another Step Forward

Diesel Electric Propulsion Chosen *for* Ocean Cargo Vessels

Principal Motors and Generators of the Defiance and Triumph

1 4000 shp. propulsion motor
4 800 kw. generators
4 100 kw. exciters
2 70 hp. blower motors
1 65 hp. windlass motor
4 40-50 hp. lubricating oil and circulating water pump motors
12 25 hp. deck winch motors
1 25 hp. warping winch motor

AFTER careful investigation of cost, weight and saving of space, the Shipping Board chose to install Diesel electric propulsion of 4000 shaft horsepower for the modernization of three steam propelled freighters.

Westinghouse, with years of wide and varied experience in the design and manufacture of this type of drive for many classes of vessels, will supply the complete electrical equipment of two of these ships, the Defiance and Triumph.

Westinghouse marine apparatus is manufactured in accordance with the A. I. E. E. Marine Rules.

Westinghouse Electric & Manufacturing Company
East Pittsburgh Pennsylvania
Sales Offices in All Principal American Cities
Service Stations in Principal American Ports

Westinghouse

X97111

Vol. XXXIII **No. 3**
Published monthly by Simmons-Boardman Publishing Company, 34 North Crystal Street, East Stroudsburg, Pa. Application made for entry of the second class at the post office at East Stroudsburg., Pa., January 14, 1928, under the act of March 3, 1879.

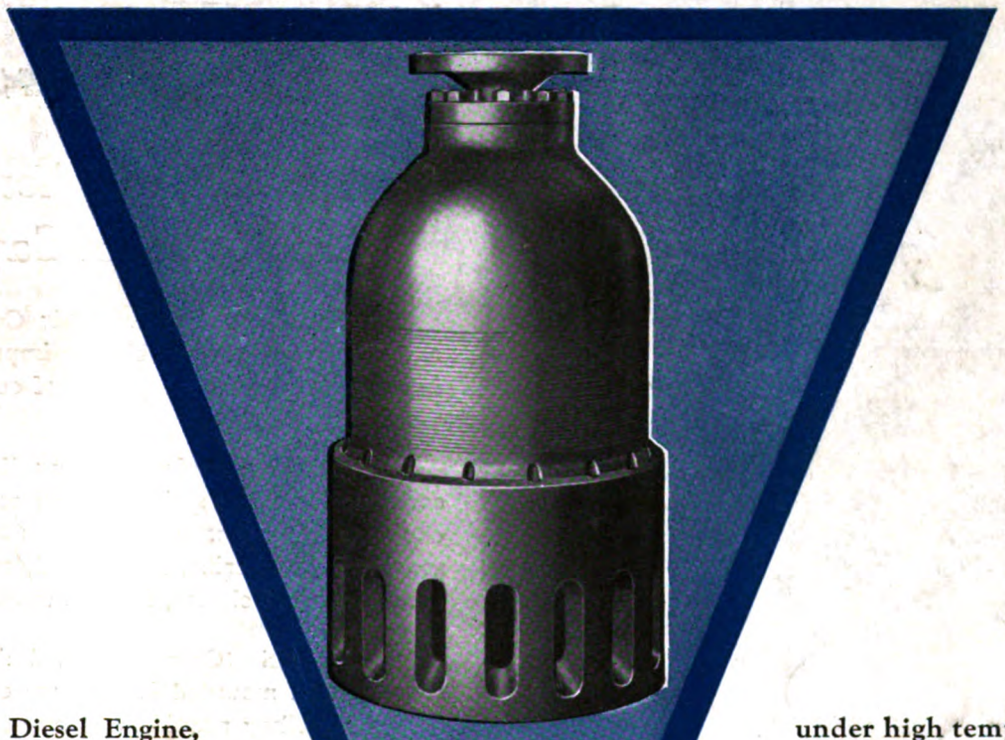
Generated on 2024-09-12 14:15 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

APRIL, 1928

Marine Engineering and Shipping Age

Eng

A FURNACE and ENGINE IN ONE UNIT



IN THE Diesel Engine, power is generated by the expansion of hot gases from the combustion of fuel oil burned in the same cylinder.

Heated from the inside and cooled by water on the outside, the transmission of heat per square foot of cylinder walls is as great as found in steam practice per square foot of boiler surface.

To meet the requirements of a combustion chamber as well as a power cylinder under high temperature and pressure, the cylinder of the Worthington Double-acting, Two-cycle Diesel Engine is made of high-strength steel forgings. The use of this material and the method of construction make possible larger horse-powers per cylinder and give Worthington many exclusive advantages.

Details of Worthington Double-acting Engines are fully described in Bulletin S-173. Please write for a copy.

WORTHINGTON PUMP & MACHINERY CORPORATION, NEW YORK CITY · · · DISTRICT OFFICES IN 24 CITIES

WORTHINGTON

Generated on 2024-09-12 14:16 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

the "bracketless-system" is gaining, and this is accounted for not only by the great advantages it has in itself to offer, but by the "backing" secured in the knowledge that the system originates from one so widely adopted in the past—proof of which is contained in the following table showing the number of ships—with the corresponding deadweight carrying capacity—contracted for in each year since 1907:

Year	Number of ships built or under construction	Deadweight carrying capacity, tons
Sept., 1907, to Dec., 1908	6	31,608
1909	36	212,922
1910	76	484,752
1911	140	658,795
1912	240	1,777,348
1913	270	1,993,034
1914	311	2,351,322
1915	468	3,548,221
1916	620	4,666,000
1917	800	6,332,150
1918	1,050	8,707,700
1919	1,260	10,594,700
1920	1,395	11,962,400
1921	1,418	12,032,400
1922	1,431	12,101,890
1923	1,443	12,174,490
1924	1,472	12,408,700
1925	1,502	12,649,730
1926	1,551	13,096,480
1927	1,618	13,491,380

TRADE PUBLICATIONS

RECORDING WATTMETERS.—The Bristol Company of Waterbury, Conn., has issued a catalogue in which devices intended to furnish continuous records of load power and lighting circuits in terms of watts are described.

TELINDICATOR INSTRUMENT.—A catalogue has been received from Th. Goldschmidt Corp. of New York describing the use of telindicator instruments in connection with canals and locks to show the condition of the locks from the main control room.

WELDING AND CUTTING EQUIPMENT.—The Torchweld Equipment Company of Chicago has issued a new No. 28 catalogue which contains considerable data on gas welding equipment. Torches, outfits and accessories for gas welding are described.

PROTECTIVE COATINGS.—Apexior Number 3 is described in a bulletin issued by the Dampney Company of America, Boston, Mass. Its use as a protective coating for cold-wet or hot-dry metal surfaces is shown in its application to boiler fronts, flues, uptakes, coal conveyors, bunkers, tanks, piping, water screens, air washers, condenser parts, and ships' bottoms.

DIRECT CURRENT MOTORS AND MOTOR GENERATORS.—Engberg's Electric and Mechanical Works, St. Joseph, Mich., has issued bulletins Nos. 6023 and 6025 covering constant and adjustable speed ball bearing direct current motors and motor generators. A complete description of this equipment is given in addition to dimensions, capacities and prices.

WELDING EQUIPMENT.—The General Electric Company, Schenectady, N. Y., has issued a folder describing atomic hydrogen arc welding equipment. This new method of welding it is claimed has proved superior to metal or cabon arc welding due to the smoothness and ductility of the welds. A description of the process as well as that of the apparatus gives a comprehensive idea of the new development.

CABINETS.—A folder has been received from the Platter Cabinet Company of North Vernon, Ind., describing a complete line of cabinets and equipment suitable for stateroom or hospital furniture on passenger ships.

PORT OF NEW ORLEANS.—The thirty-first report of the Board of Commissioners of the Port of New Orleans, La., gives a description of the facilities of the port and a report of activities of the various departments of the board as of August 31, 1927.

LOS ANGELES HARBOR.—The Board of Harbor Commissioners of the city of Los Angeles, Cal., has submitted its annual report for the fiscal year ending June 30, 1927. A description of the harbor and its development is given as well as a report of the facilities for loading cargo.

PORTS OF NORFOLK, PORTSMOUTH AND NEWPORT NEWS, VA.—Port series No. 15 of the War Department Corps of Engineers, United States Army and United States Shipping Board, deals with the facilities of these three ports. Complete information is given in regard to conditions, customs and regulations, service and charges, fuel and supplies and communications.

DRUM CONTROLLERS.—The General Electric Company, Schenectady, N. Y., has issued a bulletin illustrating the C R 3110 drum switches for series and compound wound motors used on crane hoists and for similar applications. The switches may be used on cranes having from 10 to 160 horsepower rating and have the advantages of compactness and smooth acceleration.

MARINE STEAM.—This is a new and revised edition of the well known book issued by the Babcock and Wilcox Company, New York. The work, which contains 281 pages, is replete with material of real value to the engineer. A history of the development of boilers and the theory of heat measurement, fuels and tests are dealt with in a thorough manner. The operation of marine boilers is explained, rounding out the subject of steam and its efficient generation.

WESTINGHOUSE CATALOGUE OF ELECTRICAL SUPPLIES. 1928-1930.—This catalogue presents the electrical and mechanical features and application information for all supply apparatus and appliances manufactured by the Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa., and in addition describes and illustrates a representative list of large motor and generating apparatus. Effort has been made to give the electrical industry the most accurate and complete information and data concerning many products.

"WINTON NEWS".—The first issue of *Winton News*, a monthly bulletin published by the Winton Engine Company, Cleveland, Ohio, has been distributed. An outline of the history of the Winton Engine Company is contained in the bulletin. Reference is made to recent installations of the new Winton Model 130 engine in three new yachts, two of which are now under construction at the yard of Robert Jacob, City Island, N. Y., for Messrs. L. P. and W. A. Fisher. These yachts were designd by John H. Wells, naval architect, New York.

Marine Societies

America

American Marine Association. 30 Church St., New York. President—Col. E. A. Simmons.

American Marine Standards Committee. Chairman, Colonel E. A. Simmons. Secretary, A. V. Bouillon, Division of Simplified Practice, Department of Commerce, Washington, D. C.

American Society of Marine Designers. Secretary—B. G. Barnes, 202 Kendrick Ave., Quincy, Mass.

American Society of Marine Engineers. 605 Market St., San Francisco, Calif. President—Henry F. Gelhaus. Secretary—Wm. H. Thille.

American Society of Naval Engineers. Navy Department, Washington, D. C. Secretary Treasurer—Commander H. B. Hird, U. S. N., Bureau of Engineering, Navy Department, Washington, D. C.

American Steamship Owners' Association. 11 Broadway, New York. President—H. B. Walker.

Atlantic Coast Shipbuilders' Association. 1600 Walnut Street, Philadelphia, Pa. Secretary—C. S. King.

Council of American Shipbuilders, Inc... 50 Broadway, New York. President—Homer L. Ferguson. Secretary-Treasurer—Henry C. Hunter.

Jersey Marine Club. 4th and River Streets, Hoboken, N. J. President—Col. Bartlett.

Lake Carriers' Association. President—J. S. Ashley. Secretary—George A. Marr, Rockefeller Building, Cleveland, O.

National Association of Engine and Boat Manufacturers. 29 West 39th Street, New York City. Secretary—Ira Hand.

National Association of Masters, Mates and Pilots. National Secretary—M. D. Tenniswood, 308 Vine St., Camden, N. J.

National Marine Engineers' Beneficial Association. Headquarters 311-315 Machinists Building, Washington, D. C. President—Wm. F. Yates. Secretary—Albert L. Jones.

Neptune Association. 21 Pearl St., New York City. Secretary-Treasurer—Captain John F. Milliken.

New York and New Jersey Dry Dock Association. 111 Broadway, New York. President—Jonathan Moore.

Ocean Association of Marine Engineers. 15 Whitehall St., New York. Secretary—Bert L. Todd.

Port of New York Authority. 75 West Street, New York. Chairman—George S. Silzer. Secretary—Wilson J. Vance.

Society of Naval Architects and Marine Engineers. 29 West 39th Street, New York. Secretary and Treasurer—Daniel H. Cox.

The Maritime Association of the Port of New York. 78 Broad St., New York City. President—John Dowd. Secretary—John F. Manning.

The New York Tow Boat Exchange. 11 Moore St., New York. Manager—Langdon W. Smith.

The Propeller Club of the Port of New York. President—Harry W. Parsons, 111 Broadway, New York. Secretary—W. Z. Gardner, 136 Liberty Street, New York.

United States Naval Institute. Naval Academy, Annapolis, Md. Secretary and Treasurer—Captain H. A. Baldridge, U. S. N.

United States Ship Operators' Association. 149 Broadway, New York. President—Winchester Noyes.

Canada

Grand Council N. A. of M. E. of Canada. Grand Secretary-Treasurer—W. A. MacDonald, 62 Albert St., Halifax, N. S.

Great Britain

Institute of Marine Engineers, Incorporated. 85/88 The Minories, London, E.1.

Institution of Engineers and Shipbuilders in Scotland. 39 Elmbank Crescent, Glasgow.

Institution of Naval Architects. 5 Adelphi Terrace, London, W. C.

North East Coast Institution of Engineers and Shipbuilders. Bolbec Hall, Westgate Road, Newcastle-on-Tyne.

France

Association Technique Maritime et Aéronautique. Secrétariat Général—7, rue de Madrid, Paris (8e).

Italy

Collegio Degli Ingegneri Naval e Meccanici in Italia.

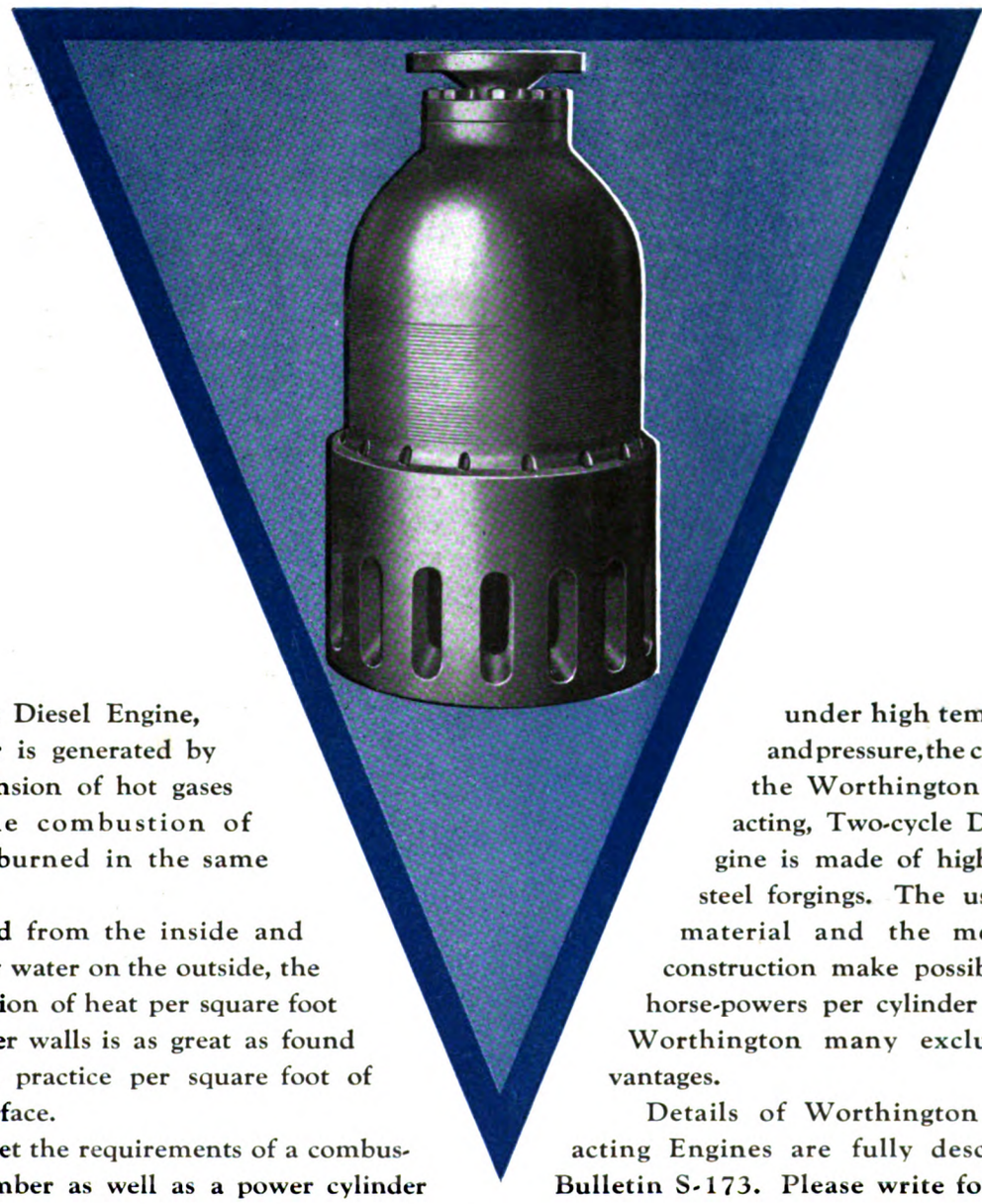
Generated on 2024-09-12 14:16 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

APRIL, 1928

Marine Engineering and Shipping Age

Eng

A FURNACE and ENGINE IN ONE UNIT



IN THE Diesel Engine, power is generated by the expansion of hot gases from the combustion of fuel oil burned in the same cylinder.

Heated from the inside and cooled by water on the outside, the transmission of heat per square foot of cylinder walls is as great as found in steam practice per square foot of boiler surface.

To meet the requirements of a combustion chamber as well as a power cylinder under high temperature and pressure, the cylinder of the Worthington Double-acting, Two-cycle Diesel Engine is made of high-strength steel forgings. The use of this material and the method of construction make possible larger horse-powers per cylinder and give Worthington many exclusive advantages.

Details of Worthington Double-acting Engines are fully described in Bulletin S-173. Please write for a copy.

WORTHINGTON PUMP & MACHINERY CORPORATION, NEW YORK CITY · · · DISTRICT OFFICES IN 24 CITIES

WORTHINGTON

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

the "bracketless-system" is gaining, and this is accounted for not only by the great advantages it has in itself to offer, but by the "backing" secured in the knowledge that the system originates from one so widely adopted in the past —proof of which is contained in the following table showing the number of ships —with the corresponding deadweight carrying capacity—contracted for in each year since 1907:

Year	Number of ships built or under construction	Deadweight carrying capacity, tons
Sept., 1907, to Dec., 1908	6	31,608
1909	36	212,922
1910	76	484,752
1911	140	658,795
1912	240	1,777,348
1913	270	1,993,034
1914	311	2,351,322
1915	468	3,548,221
1916	620	4,666,000
1917	800	6,332,150
1918	1,050	8,707,700
1919	1,260	10,594,700
1920	1,395	11,962,400
1921	1,418	12,032,400
1922	1,431	12,101,890
1923	1,443	12,174,490
1924	1,472	12,408,700
1925	1,502	12,649,730
1926	1,551	13,096,480
1927	1,618	13,491,380

TRADE PUBLICATIONS

RECORDING WATTMETERS.—The Bristol Company of Waterbury, Conn., has issued a catalogue in which devices intended to furnish continuous records of load power and lighting circuits in terms of watts are described.

TELINDICATOR INSTRUMENT.—A catalogue has been received from Th. Goldschmidt Corp. of New York describing the use of telindicator instruments in connection with canals and locks to show the condition of the locks from the main control room.

WELDING AND CUTTING EQUIPMENT.—The Torchweld Equipment Company of Chicago has issued a new No. 28 catalogue which contains considerable data on gas welding equipment. Torches, outfits and accessories for gas welding are described.

PROTECTIVE COATINGS.—Apexior Number 3 is described in a bulletin issued by the Dampney Company of America, Boston, Mass. Its use as a protective coating for cold-wet or hot-dry metal surfaces is shown in its application to boiler fronts, flues, uptakes, coal conveyors, bunkers, tanks, piping, water screens, air washers, condenser parts, and ships' bottoms.

DIRECT CURRENT MOTORS AND MOTOR GENERATORS.—Engberg's Electric and Mechanical Works, St. Joseph, Mich., has issued bulletins Nos. 6023 and 6025 covering constant and adjustable speed ball bearing direct current motors and motor generators. A complete description of this equipment is given in addition to dimensions, capacities and prices.

WELDING EQUIPMENT.—The General Electric Company, Schenectady, N. Y., has issued a folder describing atomic hydrogen arc welding equipment. This new method of welding it is claimed has proved superior to metal or cabon arc welding due to the smoothness and ductility of the welds. A description of the process as well as that of the apparatus gives a comprehensive idea of the new development.

CABINETS.—A folder has been received from the Platter Cabinet Company of North Vernon, Ind., describing a complete line of cabinets and equipment suitable for stateroom or hospital furniture on passenger ships.

PORT OF NEW ORLEANS.—The thirty-first report of the Board of Commissioners of the Port of New Orleans, La., gives a description of the facilities of the port and a report of activities of the various departments of the board as of August 31, 1927.

LOS ANGELES HARBOR.—The Board of Harbor Commissioners of the city of Los Angeles, Cal., has submitted its annual report for the fiscal year ending June 30, 1927. A description of the harbor and its development is given as well as a report of the facilities for loading cargo.

PORTS OF NORFOLK, PORTSMOUTH AND NEWPORT NEWS, VA.—Port series No. 15 of the War Department Corps of Engineers, United States Army and United States Shipping Board, deals with the facilities of these three ports. Complete information is given in regard to conditions, customs and regulations, service and charges, fuel and supplies and communications.

DRUM CONTROLLERS.—The General Electric Company, Schenectady, N. Y., has issued a bulletin illustrating the C R 3110 drum switches for series and compound wound motors used on crane hoists and for similar applications. The switches may be used on cranes having from 10 to 160 horsepower rating and have the advantages of compactness and smooth acceleration.

MARINE STEAM.—This is a new and revised edition of the well known book issued by the Babcock and Wilcox Company, New York. The work, which contains 281 pages, is replete with material of real value to the engineer. A history of the development of boilers and the theory of heat measurement, fuels and tests are dealt with in a thorough manner. The operation of marine boilers is explained, rounding out the subject of steam and its efficient generation.

WESTINGHOUSE CATALOGUE OF ELECTRICAL SUPPLIES. 1928-1930.—This catalogue presents the electrical and mechanical features and application information for all supply apparatus and appliances manufactured by the Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa., and in addition describes and illustrates a representative list of large motor and generating apparatus. Effort has been made to give the electrical industry the most accurate and complete information and data concerning many products.

"WINTON NEWS".—The first issue of *Winton News*, a monthly bulletin published by the Winton Engine Company, Cleveland, Ohio, has been distributed. An outline of the history of the Winton Engine Company is contained in the bulletin. Reference is made to recent installations of the new Winton Model 130 engine in three new yachts, two of which are now under construction at the yard of Robert Jacob, City Island, N. Y., for Messrs. L. P. and W. A. Fisher. These yachts were designd by John H. Wells, naval architect, New York.

Marine Societies

America

American Marine Association. 30 Church St., New York. President—Col. E. A. Simmons.

American Marine Standards Committee. Chairman, Colonel E. A. Simmons. Secretary, A. V. Bouillon, Division of Simplified Practice, Department of Commerce, Washington, D. C.

American Society of Marine Designers. Secretary—B. G. Barnes, 202 Kendrick Ave., Quincy, Mass.

American Society of Marine Engineers. 605 Market St., San Francisco, Calif. President—Henry F. Gelhaus. Secretary—Wm. H. Thille.

American Society of Naval Engineers. Navy Department, Washington, D. C. Secretary Treasurer—Commander H. B. Hird, U. S. N., Bureau of Engineering, Navy Department, Washington, D. C.

American Steamship Owners' Association. 11 Broadway, New York. President—H. B. Walker.

Atlantic Coast Shipbuilders' Association. 1600 Walnut Street, Philadelphia, Pa. Secretary—C. S. King.

Council of American Shipbuilders, Inc... 50 Broadway, New York. President—Homer L. Ferguson. Secretary-Treasurer—Henry C. Hunter.

Jersey Marine Club. 4th and River Streets, Hoboken, N. J. President—Col. Bartlett.

Lake Carriers' Association. President—J. S. Ashley. Secretary—George A. Marr, Rockefeller Building, Cleveland, O.

National Association of Engine and Boat Manufacturers. 29 West 39th Street, New York City. Secretary—Ira Hand.

National Association of Masters, Mates and Pilots. National Secretary—M. D. Tenniswood, 308 Vine St., Camden, N. J.

National Marine Engineers' Beneficial Association. Headquarters 311-315 Machinists Building, Washington, D. C. President—Wm. F. Yates. Secretary—Albert L. Jones.

Neptune Association. 21 Pearl St., New York City. Secretary-Treasurer—Captain John F. Milliken.

New York and New Jersey Dry Dock Association. 111 Broadway, New York. President—Jonathan Moore.

Ocean Association of Marine Engineers. 15 Whitehall St., New York. Secretary—Bert L. Todd.

Port of New York Authority. 75 West Street, New York. Chairman—George S. Silzer. Secretary—Wilson J. Vance.

Society of Naval Architects and Marine Engineers. 29 West 39th Street, New York. Secretary and Treasurer—Daniel H. Cox.

The Maritime Association of the Port of New York. 78 Broad St., New York City. President—John Dowd. Secretary—John F. Manning.

The New York Tow Boat Exchange. 11 Moore St., New York. Manager—Langdon W. Smith.

The Propeller Club of the Port of New York. President—Harry W. Parsons, 111 Broadway, New York. Secretary—W. Z. Gardner, 136 Liberty Street, New York.

United States Naval Institute. Naval Academy, Annapolis, Md. Secretary and Treasurer—Captain H. A. Baldridge, U. S. N.

United States Ship Operators' Association. 149 Broadway, New York. President—Winchester Noyes.

Canada

Grand Council N. A. of M. E. of Canada. Grand Secretary-Treasurer—W. A. MacDonald, 62 Albert St., Halifax, N. S.

Great Britain

Institute of Marine Engineers, Incorporated. 85/88 The Minories, London, E.1.

Institution of Engineers and Shipbuilders in Scotland. 39 Elmbank Crescent, Glasgow.

Institution of Naval Architects. 5 Adelphi Terrace, London, W. C.

North East Coast Institution of Engineers and Shipbuilders. Bolbec Hall, Westgate Road, Newcastle-on-Tyne.

France

Association Technique Maritime et Aéronautique. Secrétariat Général—7, rue de Madrid, Paris (8e).

Italy

Collegio Degli Ingegneri Naval e Meccanici in Italia.

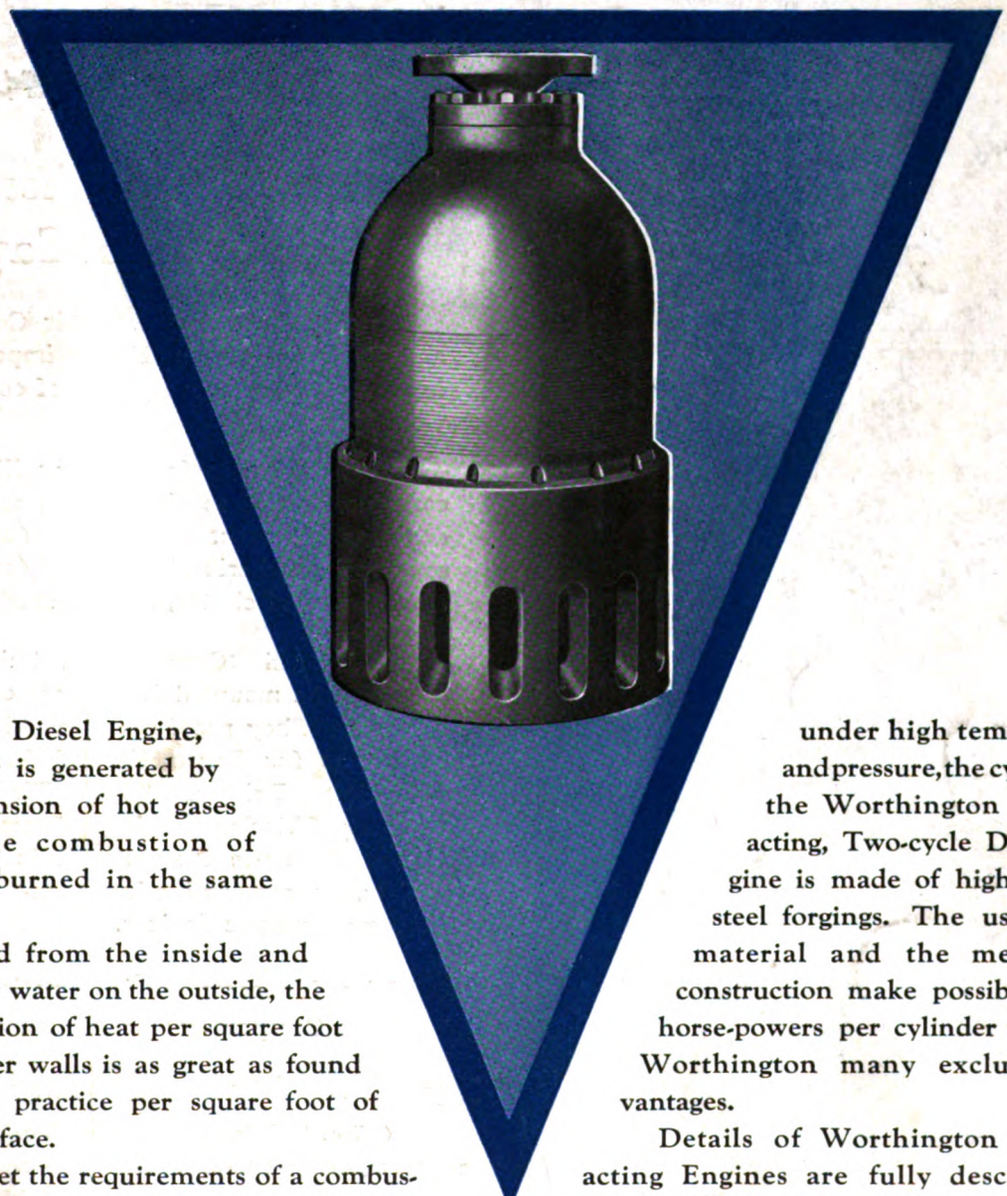
Generated on 2024-09-12 14:20 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

APRIL, 1928

Marine Engineering and Shipping Age

Eng

A FURNACE and ENGINE IN ONE UNIT



IN THE Diesel Engine, power is generated by the expansion of hot gases from the combustion of fuel oil burned in the same cylinder.

Heated from the inside and cooled by water on the outside, the transmission of heat per square foot of cylinder walls is as great as found in steam practice per square foot of boiler surface.

To meet the requirements of a combustion chamber as well as a power cylinder under high temperature and pressure, the cylinder of the Worthington Double-acting, Two-cycle Diesel Engine is made of high-strength steel forgings. The use of this material and the method of construction make possible larger horse-powers per cylinder and give Worthington many exclusive advantages.

Details of Worthington Double-acting Engines are fully described in Bulletin S-173. Please write for a copy.

WORTHINGTON PUMP & MACHINERY CORPORATION, NEW YORK CITY · · · DISTRICT OFFICES IN 24 CITIES

WORTHINGTON

Generated on 2024-09-12 14:20 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

the "bracketless-system" is gaining, and this is accounted for not only by the great advantages it has in itself to offer, but by the "backing" secured in the knowledge that the system originates from one so widely adopted in the past—proof of which is contained in the following table showing the number of ships—with the corresponding deadweight carrying capacity—contracted for in each year since 1907:

Year	Number of ships built or under construction	Deadweight carrying capacity. tons
Sept., 1907, to Dec., 1908	6	31,608
1909	36	212,922
1910	76	484,752
1911	140	658,795
1912	240	1,777,348
1913	270	1,993,034
1914	311	2,351,322
1915	468	3,548,221
1916	620	4,666,000
1917	800	6,332,150
1918	1,050	8,707,700
1919	1,260	10,594,700
1920	1,395	11,962,400
1921	1,418	12,032,400
1922	1,431	12,101,890
1923	1,443	12,174,490
1924	1,472	12,408,700
1925	1,502	12,649,730
1926	1,551	13,096,480
1927	1,618	13,491,380

TRADE PUBLICATIONS

RECORDING WATTMETERS.—The Bristol Company of Waterbury, Conn., has issued a catalogue in which devices intended to furnish continuous records of load power and lighting circuits in terms of watts are described.

TELINDICATOR INSTRUMENT.—A catalogue has been received from Th. Goldschmidt Corp. of New York describing the use of telindicator instruments in connection with canals and locks to show the condition of the locks from the main control room.

WELDING AND CUTTING EQUIPMENT.—The Torchweld Equipment Company of Chicago has issued a new No. 28 catalogue which contains considerable data on gas welding equipment. Torches, outfits and accessories for gas welding are described.

PROTECTIVE COATINGS.—Apexior Number 3 is described in a bulletin issued by the Dampney Company of America, Boston, Mass. Its use as a protective coating for cold-wet or hot-dry metal surfaces is shown in its application to boiler fronts, flues, uptakes, coal conveyors, bunkers, tanks, piping, water screens, air washers, condenser parts, and ships' bottoms.

DIRECT CURRENT MOTORS AND MOTOR GENERATORS.—Engberg's Electric and Mechanical Works, St. Joseph, Mich., has issued bulletins Nos. 6023 and 6025 covering constant and adjustable speed ball bearing direct current motors and motor generators. A complete description of this equipment is given in addition to dimensions, capacities and prices.

WELDING EQUIPMENT.—The General Electric Company, Schenectady, N. Y., has issued a folder describing atomic hydrogen arc welding equipment. This new method of welding it is claimed has proved superior to metal or cabon arc welding due to the smoothness and ductility of the welds. A description of the process as well as that of the apparatus gives a comprehensive idea of the new development.

CABINETS.—A folder has been received from the Platter Cabinet Company of North Vernon, Ind., describing a complete line of cabinets and equipment suitable for stateroom or hospital furniture on passenger ships.

PORT OF NEW ORLEANS.—The thirty-first report of the Board of Commissioners of the Port of New Orleans, La., gives a description of the facilities of the port and a report of activities of the various departments of the board as of August 31, 1927.

LOS ANGELES HARBOR.—The Board of Harbor Commissioners of the city of Los Angeles, Cal., has submitted its annual report for the fiscal year ending June 30, 1927. A description of the harbor and its development is given as well as a report of the facilities for loading cargo.

PORTS OF NORFOLK, PORTSMOUTH AND NEWPORT NEWS, VA.—Port series No. 15 of the War Department Corps of Engineers, United States Army and United States Shipping Board, deals with the facilities of these three ports. Complete information is given in regard to conditions, customs and regulations, service and charges, fuel and supplies and communications.

DRUM CONTROLLERS.—The General Electric Company, Schenectady, N. Y., has issued a bulletin illustrating the C R 3110 drum switches for series and compound wound motors used on crane hoists and for similar applications. The switches may be used on cranes having from 10 to 160 horsepower rating and have the advantages of compactness and smooth acceleration.

MARINE STEAM.—This is a new and revised edition of the well known book issued by the Babcock and Wilcox Company, New York. The work, which contains 281 pages, is replete with material of real value to the engineer. A history of the development of boilers and the theory of heat measurement, fuels and tests are dealt with in a thorough manner. The operation of marine boilers is explained, rounding out the subject of steam and its efficient generation.

WESTINGHOUSE CATALOGUE OF ELECTRICAL SUPPLIES. 1928-1930.—This catalogue presents the electrical and mechanical features and application information for all supply apparatus and appliances manufactured by the Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa., and in addition describes and illustrates a representative list of large motor and generating apparatus. Effort has been made to give the electrical industry the most accurate and complete information and data concerning many products.

"WINTON NEWS".—The first issue of *Winton News*, a monthly bulletin published by the Winton Engine Company, Cleveland, Ohio, has been distributed. An outline of the history of the Winton Engine Company is contained in the bulletin. Reference is made to recent installations of the new Winton Model 130 engine in three new yachts, two of which are now under construction at the yard of Robert Jacob, City Island, N. Y., for Messrs. L. P. and W. A. Fisher. These yachts were designd by John H. Wells, naval architect, New York.

Marine Societies

America

American Marine Association. 30 Church St., New York. President—Col. E. A. Simmons.

American Marine Standards Committee. Chairman, Colonel E. A. Simmons. Secretary, A. V. Bouillon, Division of Simplified Practice, Department of Commerce, Washington, D. C.

American Society of Marine Designers. Secretary—B. G. Barnes, 202 Kendrick Ave., Quincy, Mass.

American Society of Marine Engineers. 605 Market St., San Francisco, Calif. President—Henry F. Gelhaus. Secretary—Wm. H. Thille.

American Society of Naval Engineers. Navy Department, Washington, D. C. Secretary Treasurer—Commander H. B. Hird, U. S. N., Bureau of Engineering, Navy Department, Washington, D. C.

American Steamship Owners' Association. 11 Broadway, New York. President—H. B. Walker.

Atlantic Coast Shipbuilders' Association. 1600 Walnut Street, Philadelphia, Pa. Secretary—C. S. King.

Council of American Shipbuilders, Inc... 50 Broadway, New York. President—Homer L. Ferguson. Secretary-Treasurer—Henry C. Hunter.

Jersey Marine Club. 4th and River Streets, Hoboken, N. J. President—Col. Bartlett.

Lake Carriers' Association. President—J. S. Ashley. Secretary—George A. Marr, Rockefeller Building, Cleveland, O.

National Association of Engine and Boat Manufacturers. 29 West 39th Street, New York City. Secretary—Ira Hand.

National Association of Masters, Mates and Pilots. National Secretary—M. D. Tenniswood, 308 Vine St., Camden, N. J.

National Marine Engineers' Beneficial Association. Headquarters 311-315 Machinists Building, Washington, D. C. President—Wm. F. Yates. Secretary—Albert L. Jones.

Neptune Association. 21 Pearl St., New York City. Secretary-Treasurer—Captain John F. Milliken.

New York and New Jersey Dry Dock Association. 111 Broadway, New York. President—Jonathan Moore.

Ocean Association of Marine Engineers. 15 Whitehall St., New York. Secretary—Bert L. Todd.

Port of New York Authority. 75 West Street, New York. Chairman—George S. Silzer. Secretary—Wilson J. Vance.

Society of Naval Architects and Marine Engineers. 29 West 39th Street, New York. Secretary and Treasurer—Daniel H. Cox.

The Maritime Association of the Port of New York. 78 Broad St., New York City. President—John Dowd. Secretary—John F. Manning.

The New York Tow Boat Exchange. 11 Moore St., New York. Manager—Langdon W. Smith.

The Propeller Club of the Port of New York. President—Harry W. Parsons, 111 Broadway, New York. Secretary—W. Z. Gardner, 136 Liberty Street, New York.

United States Naval Institute. Naval Academy, Annapolis, Md. Secretary and Treasurer—Captain H. A. Baldridge, U. S. N.

United States Ship Operators' Association. 149 Broadway, New York. President—Winchester Noyes.

Canada

Grand Council N. A. of M. E. of Canada. Grand Secretary-Treasurer—W. A. MacDonald, 62 Albert St., Halifax, N. S.

Great Britain

Institute of Marine Engineers, Incorporated. 85/88 The Minories, London, E.1.

Institution of Engineers and Shipbuilders in Scotland. 39 Elmbank Crescent, Glasgow.

Institution of Naval Architects. 5 Adelphi Terrace, London, W. C.

North East Coast Institution of Engineers and Shipbuilders. Bolbec Hall, Westgate Road, Newcastle-on-Tyne.

France

Association Technique Maritime et Aéronautique. Secrétariat Général—7, rue de Madrid, Paris (8e).

Italy

Collegio Degli Ingegneri Naval e Meccanici in Italia.

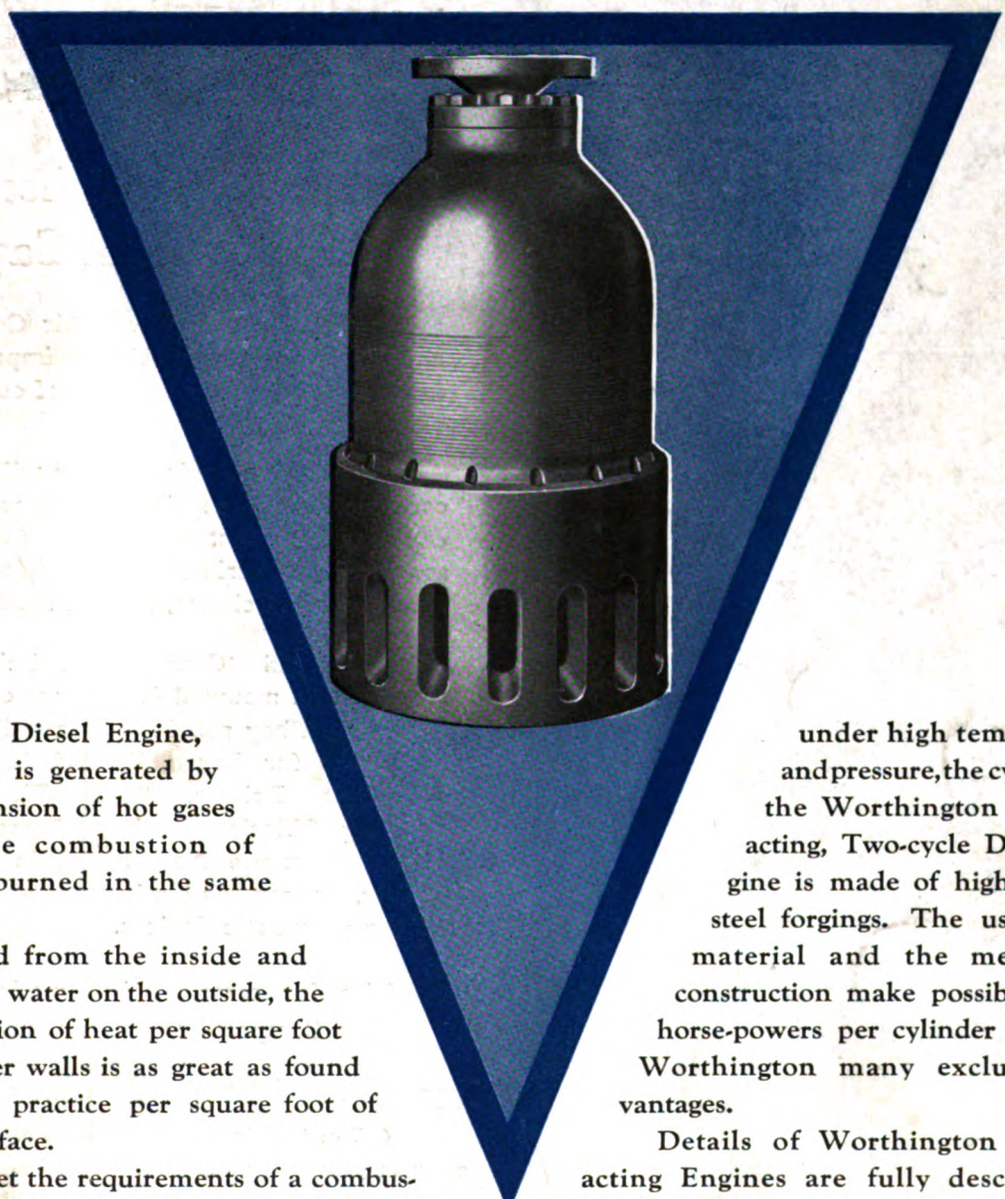
Generated on 2024-09-12 14:14 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

APRIL, 1928

Marine Engineering and Shipping Age

Eng

A FURNACE and ENGINE IN ONE UNIT



IN THE Diesel Engine, power is generated by the expansion of hot gases from the combustion of fuel oil burned in the same cylinder.

Heated from the inside and cooled by water on the outside, the transmission of heat per square foot of cylinder walls is as great as found in steam practice per square foot of boiler surface.

To meet the requirements of a combustion chamber as well as a power cylinder under high temperature and pressure, the cylinder of the Worthington Double-acting, Two-cycle Diesel Engine is made of high-strength steel forgings. The use of this material and the method of construction make possible larger horse-powers per cylinder and give Worthington many exclusive advantages.

Details of Worthington Double-acting Engines are fully described in Bulletin S-173. Please write for a copy.

WORTHINGTON PUMP & MACHINERY CORPORATION, NEW YORK CITY · · · DISTRICT OFFICES IN 24 CITIES

WORTHINGTON

Generated on 2024-09-12 14:16 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

the "bracketless-system" is gaining, and this is accounted for not only by the great advantages it has in itself to offer, but by the "backing" secured in the knowledge that the system originates from one so widely adopted in the past—proof of which is contained in the following table showing the number of ships—with the corresponding deadweight carrying capacity—contracted for in each year since 1907:

Year	Number of ships built or under construction	Deadweight carrying capacity, tons
Sept., 1907, to Dec., 1908	6	31,608
1909	36	212,922
1910	76	484,752
1911	140	658,795
1912	240	1,777,348
1913	270	1,993,034
1914	311	2,351,322
1915	468	3,548,221
1916	620	4,666,000
1917	800	6,332,150
1918	1,050	8,707,700
1919	1,260	10,594,700
1920	1,395	11,962,400
1921	1,418	12,032,400
1922	1,431	12,101,890
1923	1,443	12,174,490
1924	1,472	12,408,700
1925	1,502	12,649,730
1926	1,551	13,096,480
1927	1,618	13,491,380

TRADE PUBLICATIONS

RECORDING WATTMETERS.—The Bristol Company of Waterbury, Conn., has issued a catalogue in which devices intended to furnish continuous records of load power and lighting circuits in terms of watts are described.

TELINDICATOR INSTRUMENT.—A catalogue has been received from Th. Goldschmidt Corp. of New York describing the use of telindicator instruments in connection with canals and locks to show the condition of the locks from the main control room.

WELDING AND CUTTING EQUIPMENT.—The Torchweld Equipment Company of Chicago has issued a new No. 28 catalogue which contains considerable data on gas welding equipment. Torches, outfits and accessories for gas welding are described.

PROTECTIVE COATINGS.—Apexior Number 3 is described in a bulletin issued by the Dampney Company of America, Boston, Mass. Its use as a protective coating for cold-wet or hot-dry metal surfaces is shown in its application to boiler fronts, flues, uptakes, coal conveyors, bunkers, tanks, piping, water screens, air washers, condenser parts, and ships' bottoms.

DIRECT CURRENT MOTORS AND MOTOR GENERATORS.—Engberg's Electric and Mechanical Works, St. Joseph, Mich., has issued bulletins Nos. 6023 and 6025 covering constant and adjustable speed ball bearing direct current motors and motor generators. A complete description of this equipment is given in addition to dimensions, capacities and prices.

WELDING EQUIPMENT.—The General Electric Company, Schenectady, N. Y., has issued a folder describing atomic hydrogen arc welding equipment. This new method of welding it is claimed has proved superior to metal or cabon arc welding due to the smoothness and ductility of the welds. A description of the process as well as that of the apparatus gives a comprehensive idea of the new development.

CABINETS.—A folder has been received from the Platter Cabinet Company of North Vernon, Ind., describing a complete line of cabinets and equipment suitable for stateroom or hospital furniture on passenger ships.

PORT OF NEW ORLEANS.—The thirty-first report of the Board of Commissioners of the Port of New Orleans, La., gives a description of the facilities of the port and a report of activities of the various departments of the board as of August 31, 1927.

LOS ANGELES HARBOR.—The Board of Harbor Commissioners of the city of Los Angeles, Cal., has submitted its annual report for the fiscal year ending June 30, 1927. A description of the harbor and its development is given as well as a report of the facilities for loading cargo.

PORTS OF NORFOLK, PORTSMOUTH AND NEWPORT NEWS, VA.—Port series No. 15 of the War Department Corps of Engineers, United States Army and United States Shipping Board, deals with the facilities of these three ports. Complete information is given in regard to conditions, customs and regulations, service and charges, fuel and supplies and communications.

DRUM CONTROLLERS.—The General Electric Company, Schenectady, N. Y., has issued a bulletin illustrating the C R 3110 drum switches for series and compound wound motors used on crane hoists and for similar applications. The switches may be used on cranes having from 10 to 160 horsepower rating and have the advantages of compactness and smooth acceleration.

MARINE STEAM.—This is a new and revised edition of the well known book issued by the Babcock and Wilcox Company, New York. The work, which contains 281 pages, is replete with material of real value to the engineer. A history of the development of boilers and the theory of heat measurement, fuels and tests are dealt with in a thorough manner. The operation of marine boilers is explained, rounding out the subject of steam and its efficient generation.

WESTINGHOUSE CATALOGUE OF ELECTRICAL SUPPLIES. 1928-1930.—This catalogue presents the electrical and mechanical features and application information for all supply apparatus and appliances manufactured by the Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa., and in addition describes and illustrates a representative list of large motor and generating apparatus. Effort has been made to give the electrical industry the most accurate and complete information and data concerning many products.

"WINTON NEWS".—The first issue of *Winton News*, a monthly bulletin published by the Winton Engine Company, Cleveland, Ohio, has been distributed. An outline of the history of the Winton Engine Company is contained in the bulletin. Reference is made to recent installations of the new Winton Model 130 engine in three new yachts, two of which are now under construction at the yard of Robert Jacob, City Island, N. Y., for Messrs. L. P. and W. A. Fisher. These yachts were designd by John H. Wells, naval architect, New York.

Marine Societies

America

American Marine Association. 30 Church St., New York. President—Col. E. A. Simmons.

American Marine Standards Committee. Chairman, Colonel E. A. Simmons. Secretary, A. V. Bouillon, Division of Simplified Practice, Department of Commerce, Washington, D. C.

American Society of Marine Designers. Secretary—B. G. Barnes, 202 Kendrick Ave., Quincy, Mass.

American Society of Marine Engineers. 605 Market St., San Francisco, Calif. President—Henry F. Gelhaus. Secretary—Wm. H. Thille.

American Society of Naval Engineers. Navy Department, Washington, D. C. Secretary Treasurer—Commander H. B. Hird, U. S. N., Bureau of Engineering, Navy Department, Washington, D. C.

American Steamship Owners' Association. 11 Broadway, New York. President—H. B. Walker.

Atlantic Coast Shipbuilders' Association. 1600 Walnut Street, Philadelphia, Pa. Secretary—C. S. King.

Council of American Shipbuilders, Inc... 50 Broadway, New York. President—Homer L. Ferguson. Secretary-Treasurer—Henry C. Hunter.

Jersey Marine Club. 4th and River Streets, Hoboken, N. J. President—Col. Bartlett.

Lake Carriers' Association. President—J. S. Ashley. Secretary—George A. Marr, Rockefeller Building, Cleveland, O.

National Association of Engine and Boat Manufacturers. 29 West 39th Street, New York City. Secretary—Ira Hand.

National Association of Masters, Mates and Pilots. National Secretary—M. D. Tenniswood, 308 Vine St., Camden, N. J.

National Marine Engineers' Beneficial Association. Headquarters 311-315 Machinists Building, Washington, D. C. President—Wm. F. Yates. Secretary—Albert L. Jones.

Neptune Association. 21 Pearl St., New York City. Secretary-Treasurer—Captain John F. Milliken.

New York and New Jersey Dry Dock Association. 111 Broadway, New York. President—Jonathan Moore.

Ocean Association of Marine Engineers. 15 Whitehall St., New York. Secretary—Bert L. Todd.

Port of New York Authority. 75 West Street, New York. Chairman—George S. Silzer. Secretary—Wilson J. Vance.

Society of Naval Architects and Marine Engineers. 29 West 39th Street, New York. Secretary and Treasurer—Daniel H. Cox.

The Maritime Association of the Port of New York. 78 Broad St., New York City. President—John Dowd. Secretary—John F. Manning.

The New York Tow Boat Exchange. 11 Moore St., New York. Manager—Langdon W. Smith.

The Propeller Club of the Port of New York. President—Harry W. Parsons, 111 Broadway, New York. Secretary—W. Z. Gardner, 136 Liberty Street, New York.

United States Naval Institute. Naval Academy, Annapolis, Md. Secretary and Treasurer—Captain H. A. Baldridge, U. S. N.

United States Ship Operators' Association. 149 Broadway, New York. President—Winchester Noyes.

Canada

Grand Council N. A. of M. E. of Canada. Grand Secretary-Treasurer—W. A. MacDonald, 62 Albert St., Halifax, N. S.

Great Britain

Institute of Marine Engineers, Incorporated. 85/88 The Minories, London, E.1.

Institution of Engineers and Shipbuilders in Scotland. 39 Elmbank Crescent, Glasgow.

Institution of Naval Architects. 5 Adelphi Terrace, London, W. C.

North East Coast Institution of Engineers and Shipbuilders. Bolbec Hall, Westgate Road, Newcastle-on-Tyne.

France

Association Technique Maritime et Aéronautique. Secrétariat Général—7, rue de Madrid, Paris (8e).

Italy

Collegio Degli Ingegneri Naval e Meccanici in Italia.

Generated on 2024-09-12 14:17 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

APRIL, 1928

Marine Engineering and Shipping Age

Eng

A FURNACE and ENGINE IN ONE UNIT

IN THE Diesel Engine, power is generated by the expansion of hot gases from the combustion of fuel oil burned in the same cylinder.

Heated from the inside and cooled by water on the outside, the transmission of heat per square foot of cylinder walls is as great as found in steam practice per square foot of boiler surface.

To meet the requirements of a combustion chamber as well as a power cylinder under high temperature and pressure, the cylinder of the Worthington Double-acting, Two-cycle Diesel Engine is made of high-strength steel forgings. The use of this material and the method of construction make possible larger horse-powers per cylinder and give Worthington many exclusive advantages.

Details of Worthington Double-acting Engines are fully described in Bulletin S-173. Please write for a copy.

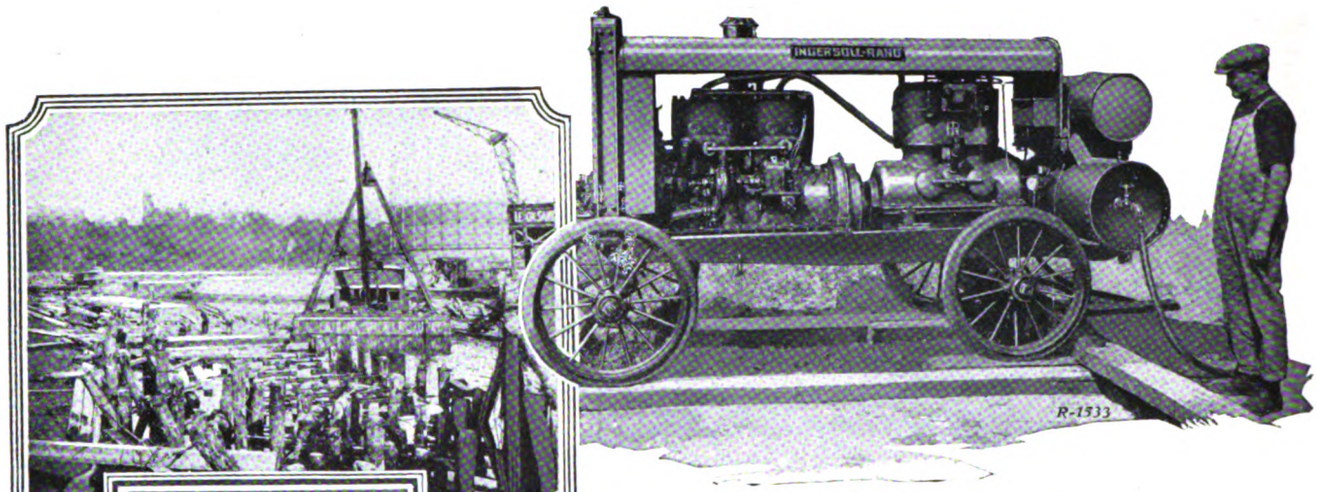
WORTHINGTON PUMP & MACHINERY CORPORATION, NEW YORK CITY · · · DISTRICT OFFICES IN 24 CITIES

WORTHINGTON

Generated on 2024-09-12 14:49 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from UNIVERSITY OF MICHIGAN



Above: Type 20 Portable Air Compressor.

Left: I-R Woodboring Drills and "Safety-First" Air Saws speeded the construction work on this bulkhead job.

Afloat or Ashore, These Outfits Are Big Labor-Savers

Ingersoll-Rand Portable Air Compressors and Tools are responsible for important savings in practically every type of construction work.

Around the waterfront, they will speed up construction and repair work on wooden and concrete wharves, piers, breakwaters, caissons, rock-filled cribs, barges, and scows; grain elevators, coal chutes, freight sheds, etc.

I-R Portable Compressors, built in six sizes, can be mounted on a barge or operated on shore. They provide a convenient source of power for Ingersoll-Rand Woodborers, Drift-Bolt Drivers, "Safety-First" Saws, Scarfing Chisels, Calking Hammers, Rock Drills, Concrete Breakers, Pile Hammers, Hoists, Pumps, and other time- and labor-saving pneumatic devices.

Write for complete information on our Portable Compressors and Pneumatic Tools.

Ingersoll-Rand Co., 11 Broadway, New York

Offices in Principal Cities the World Over

Canadian Ingersoll-Rand Company, Ltd., 10 Phillips Square, Montreal, Que.

150-PC

Ingersoll-Rand

Vol. XXXIII No. 4
Published monthly by Simmons-Boardman Publishing Company, 34 North Crystal Street, East Stroudsburg, Pa. Entered as second class matter, March 15, 1928, at the post office at East Stroudsburg, Pa., under the act of March 3, 1879.

Generated on 2024-09-12 14:15 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

JUNE, 1928

Marine Engineering and Shipping Age

COLUMBIAN

TOW-RO

PURE MANILA ROPE

I can give you every advantage you can find in any Tow Line on the market today, plus some special advantages which are exclusive to me. Here's what I offer you:—

I can be easily spliced.
I am Guaranteed by the Columbian *Tape-Marker*.
I bear every strain uniformly because of my large heart, composed of slightly twisted fibre.
I am thoroughly waterproofed.
I retain my form in the sea or out.
I have flexibility without distortion.

So that all will know me I plainly show my Columbian colors in the order of Red, Blue and Red. I am

Columbian Tow-Ro
(TOW ROPE)

COLUMBIAN ROPE COMPANY
Auburn, N. Y. *"The Cordage City"*
New York Boston New Orleans Chicago

35 CENTS A COPY

Generated on 2024-09-12 14:14 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Justin G. Smeby has been appointed welding engineer at the South Philadelphia Works of the **Westinghouse Electric & Manufacturing Company.** Mr. Smeby is a member of the American Society of Naval Architects and Marine Engineers and an officer in the United States Naval Reserve Force.

The **National Flue Cleaner Company,** Groveville, N. J., manufacturers of soot blowers for firetube boilers, has recently appointed the **Furnace Improvement Company,** Providence, R. I., representative in New England and the **Naylor-Hickey Corporation,** Chicago, Ill., representative in Chicago.

The executive offices of the **Worthington Pump & Machinery Corporation,** also its export sales department and New York district sales department have moved to 2 Park avenue, New York. The head office, sales and advertising departments have been moved to the Harrison plant of the corporation, located at 421 Worthington Avenue, Harrison, N. J.

The **Colgan Manufacturing & Supply Company** will move from its present location at 118-120 Maiden Lane, to new quarters at 8-10 Bridge street, New York. The Colgan Manufacturing & Supply Company is the sole manufacturer of Colganoil, a high grade marine lubricating oil, which has been in use for nearly 50 years.

Joseph S. Jones, vice president of, and for ten years associated with, **Charles Cory & Son, Inc.,** manufacturers of marine equipment, has resigned. He entered the service of this company as engineer and since that time has occupied the position of general commercial manager, assistant to president and general manager and vice president in charge of sales and engineering, which position he held up to April of this year when his resignation took effect. He has been responsible for the creation and development of various types of signal and communicating appliances, both for marine and industrial purposes.

Henry F. Schmidt, consulting engineer of the **Westinghouse Electric & Manufacturing Company,** South Philadelphia Works, has been recently awarded the medal of the **American Society of Naval Engineers** for the best article submitted during the year 1927. Mr. Schmidt, besides being awarded a gold medal, was given an honorary life membership in the society and a cash prize for his paper, entitled "Some Screw Propeller Experiments with Particular Reference to Pumps and Blowers." The presentation of the awards to Mr. Schmidt was made by Secretary of the Navy Wilbur at the annual dinner of the society which was held at the Willard Hotel, Washington, D. C.

Trade Publications

Diesel Yacht Cressida.—A booklet has been distributed by Cox and Stevens, New York giving a complete description of the seagoing auxiliary Diesel yacht *Cressida* built for Hermann Oelrichs.

Gas Ranges.—The Stamford Foundry Company, of Stamford, Conn., has issued a catalogue describing Shipmate gas ranges. These may be used on yachts and small vessels and are capable of doing all sorts of cooking including baking and broiling. The fuel, a non-poisonous gas, is contained in steel cylinders which are easily stored.

Boilers.—The Hartford Steam Boiler Inspection and Insurance Company, Hartford, Conn., has issued the second edition of "The Boiler Book." This book contains some of the data most frequently required for the design and installation of boilers and other pressure vessels.

Fuel Burning Systems.—A booklet giving a "Description of Peabody Fuel Burning Systems and Operating Instructions," has been published by the Peabody Engineering Corporation of New York. The Peabody-Fisher wide range oil burner, the Peabody gas burner and combined gas and oil burner as well as the pulverized coal burners are described.

Auxiliary Turbine Generator Units.—The Westinghouse Electric and Manufacturing Company, South Philadelphia, Pa., has recently released a leaflet No. 20-338 describing marine auxiliary turbine generators. The leaflet covers units of 5 to 15 kilowatts capacity for direct current operation, using direct connected turbines. This leaflet also describes geared turbine generator units for alternating current service in ratings from 25 up to and including 500 kilowatts.

Nickel Cast Iron.—Bulletin No. 205, the fifth of a series on nickel cast iron, has been published by the International Nickel Company of New York. The article entitled "The Practical and Economic Value of Nickel and Chromium in Gray Cast Iron," was written by D. M. Houston. A comparison of costs and savings for various alloys is given.

Gas Cutting.—A pamphlet issued by the Air Reduction Sales Company of New York, entitled "Factors Involved in Economical Gas Cutting," by J. L. Anderson, has been received. While the author did not undertake to give a complete analysis of all the factors involved in cutting, he has covered those of most importance to the average user of the cutting process.

Diesel Engines.—A bulletin describing the new type Winton Diesel engine has been issued by the Winton Engine Company of Cleveland, Ohio. The installation of two of these engines in the 94-foot cruiser-houseboat *Nicoya* owned by F. B. Lovejoy marks the introduction of this engine in the first known Diesel powered houseboat.

Burners.—A pamphlet entitled "What's New" has been distributed by the Peabody Engineering corporation of New York. New equipment manufactured by this concern is described in this booklet. Among the new types of products are the "Toronto" powdered coal burner, the insulated burner front, oil burners, combined gas and oil burners and a new automatic viscosity regulator.

Marine Societies

America

American Marine Association. 30 Church St., New York. President—Col. E. A. Simmons.

American Marine Standards Committee. Chairman, Colonel E. A. Simmons. Secretary, A. V. Bouillon, Division of Simplified Practice, Department of Commerce, Washington, D. C.

American Society of Marine Designers. Secretary—B. G. Barnes, 202 Kendrick Ave., Quincy, Mass.

American Society of Marine Engineers. 605 Market St., San Francisco, Calif. President—Henry F. Gelhaus. Secretary—Wm. H. Thille.

American Society of Naval Engineers. Navy Department, Washington, D. C. Secretary Treasurer—Commander H. B. Hird, U. S. N., Bureau of Engineering, Navy Department, Washington, D. C.

American Steamship Owners' Association. 11 Broadway, New York. President—H. B. Walker.

Atlantic Coast Shipbuilders' Association. 1600 Walnut Street, Philadelphia, Pa. Secretary—C. S. King.

Council of American Shipbuilders, Inc. 50 Broadway, New York. President—Homer L. Ferguson. Secretary-Treasurer—Henry C. Hunter.

Jersey Marine Club. 4th and River Streets, Hoboken, N. J. Secretary—Fred L. Broad.

Lake Carriers' Association. President—J. S. Ashley. Secretary—George A. Marr, Rockefeller Building, Cleveland, O.

National Association of Engine and Boat Manufacturers. 29 West 39th Street, New York City. Secretary—Ira Hand.

National Association of Masters, Mates and Pilots. National Secretary—M. D. Tenniswood, 308 Vine St., Camden, N. J.

National Marine Engineers' Beneficial Association. Headquarters 311-315 Machinists Building, Washington, D. C. President—Wm. F. Yates. Secretary—Albert L. Jones.

Neptune Association. 21 Pearl St., New York City. Secretary-Treasurer—Captain John F. Milliken.

New York and New Jersey Dry Dock Association. 111 Broadway, New York. President—Jonathan Moore.

Ocean Association of Marine Engineers. 15 Whitehall St., New York. Secretary—Bert L. Todd.

Port of New York Authority. 75 West Street, New York. Chairman—George S. Silzer. Secretary—Wilson J. Vance.

Society of Naval Architects and Marine Engineers. 29 West 39th Street, New York. Secretary and Treasurer—Daniel H. Cox.

The Maritime Association of the Port of New York. 78 Broad St., New York City. President—John Dowd. Secretary—John F. Manning.

The New York Tow Boat Exchange. 11 Moore St., New York. Manager—Langdon W. Smith.

The Propeller Club of the Port of New York. President—Harry W. Parsons, 111 Broadway, New York. Secretary—W. Z. Gardner, 136 Liberty Street, New York.

United States Naval Institute. Naval Academy, Annapolis, Md. Secretary and Treasurer—Captain H. A. Baldridge, U. S. N.

United States Ship Operators' Association. 149 Broadway, New York. President—Winchester Noyes.

Canada

Grand Council N. A. of M. E. of Canada. Grand Secretary-Treasurer—W. A. MacDonald, 62 Albert St., Halifax, N. S.

Great Britain

Institute of Marine Engineers, Incorporated. 85/88 The Minories, London, E.1.

Institution of Engineers and Shipbuilders in Scotland. 39 Elmbank Crescent, Glasgow.

Institution of Naval Architects. 5 Adelphi Terrace, London, W. C.

North East Coast Institution of Engineers and Shipbuilders. Bolbec Hall, Westgate Road, Newcastle-on-Tyne.

France

Association Technique Maritime et Aéronautique. Secrétariat Général—7, rue de Madrid, Paris (8e).

Italy

Collegio Degli Ingegneri Naval e Meccanici in Italia.

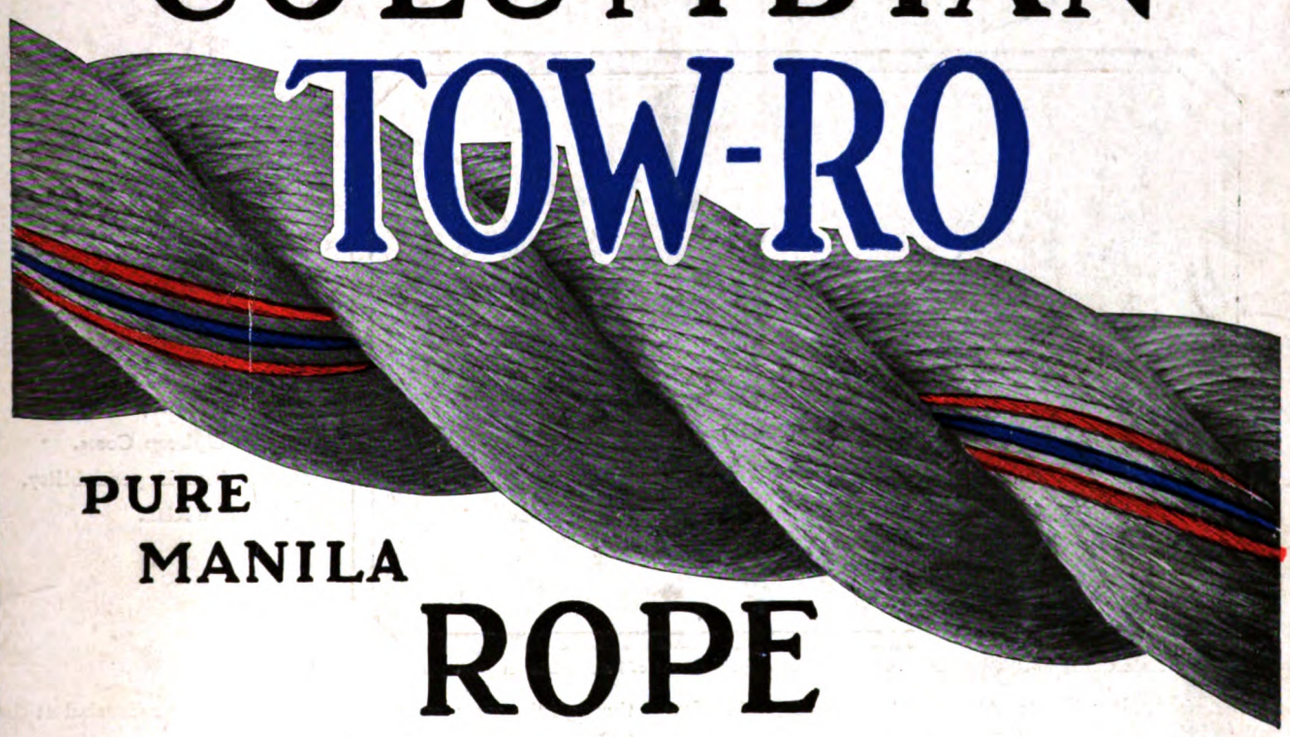
Generated on 2024-09-12 14:15 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

JUNE, 1928

Marine Engineering and Shipping Age

COLUMBIAN

TOW-RO



PURE MANILA ROPE

I can give you every advantage you can find in any Tow Line on the market today, plus some special advantages which are exclusive to me. Here's what I offer you:—

I can be easily spliced.
I am Guaranteed by the Columbian *Tape-Marker*.
I bear every strain uniformly because of my large heart, composed of slightly twisted fibre.
I am thoroughly waterproofed.
I retain my form in the sea or out.
I have flexibility without distortion.

So that all will know me I plainly show my Columbian colors in the order of Red, Blue and Red. I am

Columbian Tow-Ro (TOW ROPE)

COLUMBIAN ROPE COMPANY
Auburn, N. Y. *"The Cordage City"*
New York Boston New Orleans Chicago

35 CENTS A COPY

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Justin G. Smeby has been appointed welding engineer at the South Philadelphia Works of the **Westinghouse Electric & Manufacturing Company.** Mr. Smeby is a member of the American Society of Naval Architects and Marine Engineers and an officer in the United States Naval Reserve Force.

The **National Flue Cleaner Company,** Groveville, N. J., manufacturers of soot blowers for firetube boilers, has recently appointed the **Furnace Improvement Company,** Providence, R. I., representative in New England and the **Naylor-Hickey Corporation,** Chicago, Ill., representative in Chicago.

The executive offices of the **Worthington Pump & Machinery Corporation,** also its export sales department and New York district sales department have moved to 2 Park avenue, New York. The head office, sales and advertising departments have been moved to the Harrison plant of the corporation, located at 421 Worthington Avenue, Harrison, N. J.

The **Colgan Manufacturing & Supply Company** will move from its present location at 118-120 Maiden Lane, to new quarters at 8-10 Bridge street, New York. The Colgan Manufacturing & Supply Company is the sole manufacturer of Colganoil, a high grade marine lubricating oil, which has been in use for nearly 50 years.

Joseph S. Jones, vice president of, and for ten years associated with, **Charles Cory & Son, Inc.,** manufacturers of marine equipment, has resigned. He entered the service of this company as engineer and since that time has occupied the position of general commercial manager, assistant to president and general manager and vice president in charge of sales and engineering, which position he held up to April of this year when his resignation took effect. He has been responsible for the creation and development of various types of signal and communicating appliances, both for marine and industrial purposes.

Henry F. Schmidt, consulting engineer of the **Westinghouse Electric & Manufacturing Company,** South Philadelphia Works, has been recently awarded the medal of the **American Society of Naval Engineers** for the best article submitted during the year 1927. Mr. Schmidt, besides being awarded a gold medal, was given an honorary life membership in the society and a cash prize for his paper, entitled "Some Screw Propeller Experiments with Particular Reference to Pumps and Blowers." The presentation of the awards to Mr. Schmidt was made by Secretary of the Navy Wilbur at the annual dinner of the society which was held at the Willard Hotel, Washington, D. C.

Trade Publications

Diesel Yacht Cressida.—A booklet has been distributed by Cox and Stevens, New York giving a complete description of the seagoing auxiliary Diesel yacht *Cressida* built for Hermann Oelrichs.

Gas Ranges.—The Stamford Foundry Company, of Stamford, Conn., has issued a catalogue describing Shipmate gas ranges. These may be used on yachts and small vessels and are capable of doing all sorts of cooking including baking and broiling. The fuel, a non-poisonous gas, is contained in steel cylinders which are easily stored.

Boilers.—The Hartford Steam Boiler Inspection and Insurance Company, Hartford, Conn., has issued the second edition of "The Boiler Book." This book contains some of the data most frequently required for the design and installation of boilers and other pressure vessels.

Fuel Burning Systems.—A booklet giving a "Description of Peabody Fuel Burning Systems and Operating Instructions," has been published by the Peabody Engineering Corporation of New York. The Peabody-Fisher wide range oil burner, the Peabody gas burner and combined gas and oil burner as well as the pulverized coal burners are described.

Auxiliary Turbine Generator Units.—The Westinghouse Electric and Manufacturing Company, South Philadelphia, Pa., has recently released a leaflet No. 20-338 describing marine auxiliary turbine generators. The leaflet covers units of 5 to 15 kilowatts capacity for direct current operation, using direct connected turbines. This leaflet also describes geared turbine generator units for alternating current service in ratings from 25 up to and including 500 kilowatts.

Nickel Cast Iron.—Bulletin No. 205, the fifth of a series on nickel cast iron, has been published by the International Nickel Company of New York. The article entitled "The Practical and Economic Value of Nickel and Chromium in Gray Cast Iron," was written by D. M. Houston. A comparison of costs and savings for various alloys is given.

Gas Cutting.—A pamphlet issued by the Air Reduction Sales Company of New York, entitled "Factors Involved in Economical Gas Cutting," by J. L. Anderson, has been received. While the author did not undertake to give a complete analysis of all the factors involved in cutting, he has covered those of most importance to the average user of the cutting process.

Diesel Engines.—A bulletin describing the new type Winton Diesel engine has been issued by the Winton Engine Company of Cleveland, Ohio. The installation of two of these engines in the 94-foot cruiser-houseboat *Nicoya* owned by F. B. Lovejoy marks the introduction of this engine in the first known Diesel powered houseboat.

Burners.—A pamphlet entitled "What's New" has been distributed by the Peabody Engineering corporation of New York. New equipment manufactured by this concern is described in this booklet. Among the new types of products are the "Toronto" powdered coal burner, the insulated burner front, oil burners, combined gas and oil burners and a new automatic viscosity regulator.

Marine Societies

America

American Marine Association. 30 Church St., New York. President—Col. E. A. Simmons.

American Marine Standards Committee. Chairman, Colonel E. A. Simmons. Secretary, A. V. Bouillon, Division of Simplified Practice, Department of Commerce, Washington, D. C.

American Society of Marine Designers. Secretary—B. G. Barnes, 202 Kendrick Ave., Quincy, Mass.

American Society of Marine Engineers. 605 Market St., San Francisco, Calif. President—Henry F. Gelhaus. Secretary—Wm. H. Thille.

American Society of Naval Engineers. Navy Department, Washington, D. C. Secretary Treasurer—Commander H. B. Hird, U. S. N., Bureau of Engineering, Navy Department, Washington, D. C.

American Steamship Owners' Association. 11 Broadway, New York. President—H. B. Walker.

Atlantic Coast Shipbuilders' Association. 1600 Walnut Street, Philadelphia, Pa. Secretary—C. S. King.

Council of American Shipbuilders, Inc. 50 Broadway, New York. President—Homer L. Ferguson. Secretary-Treasurer—Henry C. Hunter.

Jersey Marine Club. 4th and River Streets, Hoboken, N. J. Secretary—Fred L. Broad.

Lake Carriers' Association. President—J. S. Ashley. Secretary—George A. Marr, Rockefeller Building, Cleveland, O.

National Association of Engine and Boat Manufacturers. 29 West 39th Street, New York City. Secretary—Ira Hand.

National Association of Masters, Mates and Pilots. National Secretary—M. D. Tenniswood, 308 Vine St., Camden, N. J.

National Marine Engineers' Beneficial Association. Headquarters 311-315 Machinists Building, Washington, D. C. President—Wm. F. Yates. Secretary—Albert L. Jones.

Neptune Association. 21 Pearl St., New York City. Secretary-Treasurer—Captain John F. Milliken.

New York and New Jersey Dry Dock Association. 111 Broadway, New York. President—Jonathan Moore.

Ocean Association of Marine Engineers. 15 Whitehall St., New York. Secretary—Bert L. Todd.

Port of New York Authority. 75 West Street, New York. Chairman—George S. Silzer. Secretary—Wilson J. Vance.

Society of Naval Architects and Marine Engineers. 29 West 39th Street, New York. Secretary and Treasurer—Daniel H. Cox.

The Maritime Association of the Port of New York. 78 Broad St., New York City. President—John Dowd. Secretary—John F. Manning.

The New York Tow Boat Exchange. 11 Moore St., New York. Manager—Langdon W. Smith.

The Propeller Club of the Port of New York. President—Harry W. Parsons, 111 Broadway, New York. Secretary—W. Z. Gardner, 136 Liberty Street, New York.

United States Naval Institute. Naval Academy, Annapolis, Md. Secretary and Treasurer—Captain H. A. Baldridge, U. S. N.

United States Ship Operators' Association. 149 Broadway, New York. President—Winchester Noyes.

Canada

Grand Council N. A. of M. E. of Canada. Grand Secretary-Treasurer—W. A. MacDonald, 62 Albert St., Halifax, N. S.

Great Britain

Institute of Marine Engineers, Incorporated. 85/88 The Minories, London, E.1.

Institution of Engineers and Shipbuilders in Scotland. 39 Elmbank Crescent, Glasgow.

Institution of Naval Architects. 5 Adelphi Terrace, London, W. C.

North East Coast Institution of Engineers and Shipbuilders. Bolbec Hall, Westgate Road, Newcastle-on-Tyne.

France

Association Technique Maritime et Aéronautique. Secrétariat Général—7, rue de Madrid, Paris (8e).

Italy

Collegio Degli Ingegneri Naval e Meccanici in Italia.

Generated on 2024-09-12 14:20 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

JUNE, 1928

Marine Engineering and Shipping Age

COLUMBIAN

TOW-RO

PURE MANILA ROPE

I can give you every advantage you can find in any Tow Line on the market today, plus some special advantages which are exclusive to me. Here's what I offer you:—

I can be easily spliced.
I am Guaranteed by the Columbian *Tape-Marker.*
I bear every strain uniformly because of my large heart, composed of slightly twisted fibre.
I am thoroughly waterproofed.
I retain my form in the sea or out.
I have flexibility without distortion.

So that all will know me I plainly show my Columbian colors in the order of Red, Blue and Red. I am

Columbian Tow-Ro
(TOW ROPE)

COLUMBIAN ROPE COMPANY
Auburn, N. Y. *"The Cordage City"*
New York Boston New Orleans Chicago

25 CENTS A COPY

Generated on 2024-09-12 14:20 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Justin G. Smeby has been appointed welding engineer at the South Philadelphia Works of the **Westinghouse Electric & Manufacturing Company.** Mr. Smeby is a member of the American Society of Naval Architects and Marine Engineers and an officer in the United States Naval Reserve Force.

The **National Flue Cleaner Company,** Groveville, N. J., manufacturers of soot blowers for firetube boilers, has recently appointed the **Furnace Improvement Company,** Providence, R. I., representative in New England and the **Naylor-Hickey Corporation,** Chicago, Ill., representative in Chicago.

The executive offices of the **Worthington Pump & Machinery Corporation,** also its export sales department and New York district sales department have moved to 2 Park avenue, New York. The head office, sales and advertising departments have been moved to the Harrison plant of the corporation, located at 421 Worthington Avenue, Harrison, N. J.

The **Colgan Manufacturing & Supply Company** will move from its present location at 118-120 Maiden Lane, to new quarters at 8-10 Bridge street, New York. The Colgan Manufacturing & Supply Company is the sole manufacturer of Colganoil, a high grade marine lubricating oil, which has been in use for nearly 50 years.

Joseph S. Jones, vice president of, and for ten years associated with, **Charles Cory & Son, Inc.,** manufacturers of marine equipment, has resigned. He entered the service of this company as engineer and since that time has occupied the position of general commercial manager, assistant to president and general manager and vice president in charge of sales and engineering, which position he held up to April of this year when his resignation took effect. He has been responsible for the creation and development of various types of signal and communicating appliances, both for marine and industrial purposes.

Henry F. Schmidt, consulting engineer of the **Westinghouse Electric & Manufacturing Company,** South Philadelphia Works, has been recently awarded the medal of the **American Society of Naval Engineers** for the best article submitted during the year 1927. Mr. Schmidt, besides being awarded a gold medal, was given an honorary life membership in the society and a cash prize for his paper, entitled "Some Screw Propeller Experiments with Particular Reference to Pumps and Blowers." The presentation of the awards to Mr. Schmidt was made by Secretary of the Navy Wilbur at the annual dinner of the society which was held at the Willard Hotel, Washington, D. C.

Trade Publications

Diesel Yacht Cressida.—A booklet has been distributed by Cox and Stevens, New York giving a complete description of the seagoing auxiliary Diesel yacht *Cressida* built for Hermann Oelrichs.

Gas Ranges.—The Stamford Foundry Company, of Stamford, Conn., has issued a catalogue describing Shipmate gas ranges. These may be used on yachts and small vessels and are capable of doing all sorts of cooking including baking and broiling. The fuel, a non-poisonous gas, is contained in steel cylinders which are easily stored.

Boilers.—The Hartford Steam Boiler Inspection and Insurance Company, Hartford, Conn., has issued the second edition of "The Boiler Book." This book contains some of the data most frequently required for the design and installation of boilers and other pressure vessels.

Fuel Burning Systems.—A booklet giving a "Description of Peabody Fuel Burning Systems and Operating Instructions," has been published by the Peabody Engineering Corporation of New York. The Peabody-Fisher wide range oil burner, the Peabody gas burner and combined gas and oil burner as well as the pulverized coal burners are described.

Auxiliary Turbine Generator Units.—The Westinghouse Electric and Manufacturing Company, South Philadelphia, Pa., has recently released a leaflet No. 20-338 describing marine auxiliary turbine generators. The leaflet covers units of 5 to 15 kilowatts capacity for direct current operation, using direct connected turbines. This leaflet also describes geared turbine generator units for alternating current service in ratings from 25 up to and including 500 kilowatts.

Nickel Cast Iron.—Bulletin No. 205, the fifth of a series on nickel cast iron, has been published by the International Nickel Company of New York. The article entitled "The Practical and Economic Value of Nickel and Chromium in Gray Cast Iron," was written by D. M. Houston. A comparison of costs and savings for various alloys is given.

Gas Cutting.—A pamphlet issued by the Air Reduction Sales Company of New York, entitled "Factors Involved in Economical Gas Cutting," by J. L. Anderson, has been received. While the author did not undertake to give a complete analysis of all the factors involved in cutting, he has covered those of most importance to the average user of the cutting process.

Diesel Engines.—A bulletin describing the new type Winton Diesel engine has been issued by the Winton Engine Company of Cleveland, Ohio. The installation of two of these engines in the 94-foot cruiser-houseboat *Nicoya* owned by F. B. Lovejoy marks the introduction of this engine in the first known Diesel powered houseboat.

Burners.—A pamphlet entitled "What's New" has been distributed by the Peabody Engineering corporation of New York. New equipment manufactured by this concern is described in this booklet. Among the new types of products are the "Toronto" powdered coal burner, the insulated burner front, oil burners, combined gas and oil burners and a new automatic viscosity regulator.

Marine Societies

America

American Marine Association. 30 Church St., New York. President—Col. E. A. Simmons.

American Marine Standards Committee. Chairman, Colonel E. A. Simmons. Secretary, A. V. Bouillon, Division of Simplified Practice, Department of Commerce, Washington, D. C.

American Society of Marine Designers. Secretary—B. G. Barnes, 202 Kendrick Ave., Quincy, Mass.

American Society of Marine Engineers. 605 Market St., San Francisco, Calif. President—Henry F. Gelhaus. Secretary—Wm. H. Thille.

American Society of Naval Engineers. Navy Department, Washington, D. C. Secretary Treasurer—Commander H. B. Hird, U. S. N., Bureau of Engineering, Navy Department, Washington, D. C.

American Steamship Owners' Association. 11 Broadway, New York. President—H. B. Walker.

Atlantic Coast Shipbuilders' Association. 1600 Walnut Street, Philadelphia, Pa. Secretary—C. S. King.

Council of American Shipbuilders, Inc. 50 Broadway, New York. President—Homer L. Ferguson. Secretary-Treasurer—Henry C. Hunter.

Jersey Marine Club. 4th and River Streets, Hoboken, N. J. Secretary—Fred L. Broad.

Lake Carriers' Association. President—J. S. Ashley. Secretary—George A. Marr, Rockefeller Building, Cleveland, O.

National Association of Engine and Boat Manufacturers. 29 West 39th Street, New York City. Secretary—Ira Hand.

National Association of Masters, Mates and Pilots. National Secretary—M. D. Tenniswood, 308 Vine St., Camden, N. J.

National Marine Engineers' Beneficial Association. Headquarters 311-315 Machinists Building, Washington, D. C. President—Wm. F. Yates. Secretary—Albert L. Jones.

Neptune Association. 21 Pearl St., New York City. Secretary-Treasurer—Captain John F. Milliken.

New York and New Jersey Dry Dock Association. 111 Broadway, New York. President—Jonathan Moore.

Ocean Association of Marine Engineers. 15 Whitehall St., New York. Secretary—Bert L. Todd.

Port of New York Authority. 75 West Street, New York. Chairman—George S. Silzer. Secretary—Wilson J. Vance.

Society of Naval Architects and Marine Engineers. 29 West 39th Street, New York. Secretary and Treasurer—Daniel H. Cox.

The Maritime Association of the Port of New York. 78 Broad St., New York City. President—John Dowd. Secretary—John F. Manning.

The New York Tow Boat Exchange. 11 Moore St., New York. Manager—Langdon W. Smith.

The Propeller Club of the Port of New York. President—Harry W. Parsons, 111 Broadway, New York. Secretary—W. Z. Gardner, 136 Liberty Street, New York.

United States Naval Institute. Naval Academy, Annapolis, Md. Secretary and Treasurer—Captain H. A. Baldridge, U. S. N.

United States Ship Operators' Association. 149 Broadway, New York. President—Winchester Noyes.

Canada

Grand Council N. A. of M. E. of Canada. Grand Secretary-Treasurer—W. A. MacDonald, 62 Albert St., Halifax, N. S.

Great Britain

Institute of Marine Engineers, Incorporated. 85/88 The Minories, London, E.1.

Institution of Engineers and Shipbuilders in Scotland. 39 Elmbank Crescent, Glasgow.

Institution of Naval Architects. 5 Adelphi Terrace, London, W. C.

North East Coast Institution of Engineers and Shipbuilders. Bolbec Hall, Westgate Road, Newcastle-on-Tyne.

France

Association Technique Maritime et Aéronautique. Secrétariat Général—7, rue de Madrid, Paris (8e).

Italy

Collegio Degli Ingegneri Naval e Meccanici in Italia.

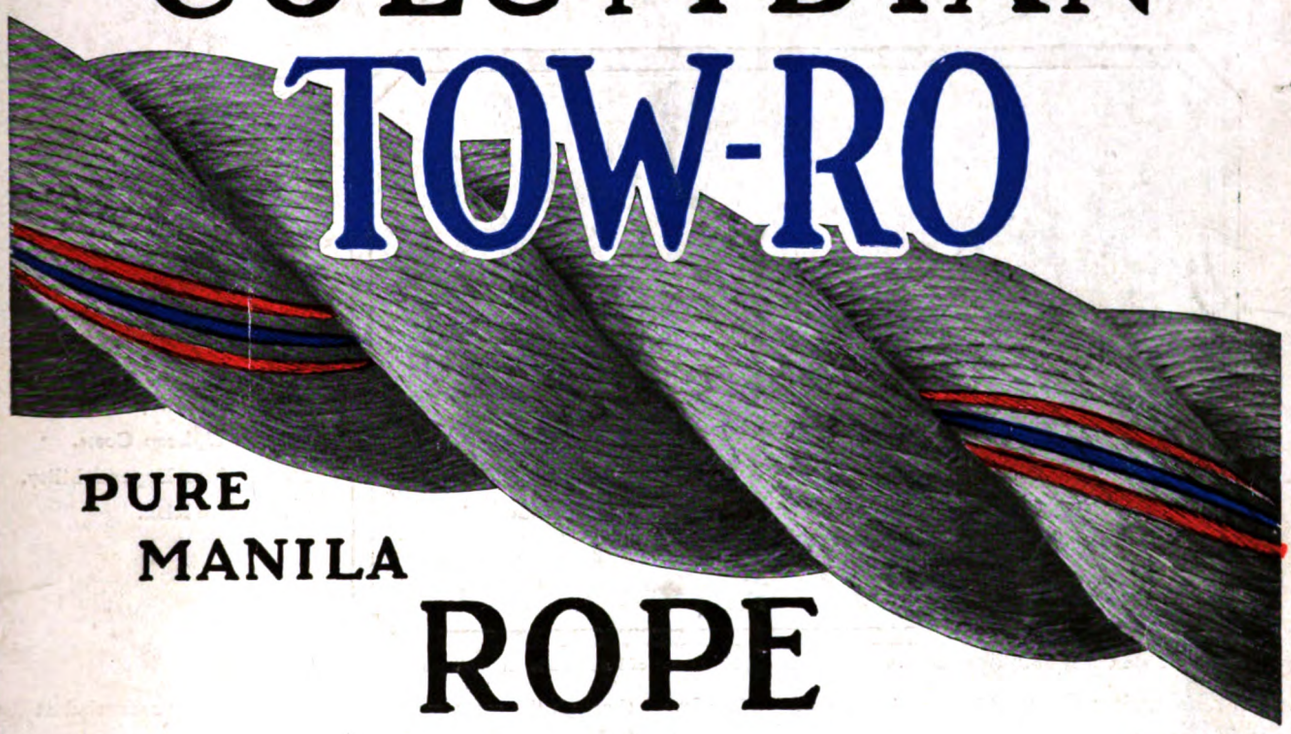
Generated on 2024-09-12 14:14 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

JUNE, 1928

Marine Engineering and Shipping Age

COLUMBIAN

TOW-RO



PURE MANILA ROPE

I can give you every advantage you can find in any Tow Line on the market today, plus some special advantages which are exclusive to me. Here's what I offer you:—

I can be easily spliced.
I am Guaranteed by the Columbian *Tape-Marker*.
I bear every strain uniformly because of my large heart, composed of slightly twisted fibre.
I am thoroughly waterproofed.
I retain my form in the sea or out.
I have flexibility without distortion.

So that all will know me I plainly show my Columbian colors in the order of Red, Blue and Red. I am

Columbian Tow-Ro
(TOW ROPE)

COLUMBIAN ROPE COMPANY
Auburn, N. Y. *"The Cordage City"*
New York Boston New Orleans Chicago

35 CENTS A COPY

Generated on 2024-09-12 15:02 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Justin G. Smeby has been appointed welding engineer at the South Philadelphia Works of the **Westinghouse Electric & Manufacturing Company.** Mr. Smeby is a member of the American Society of Naval Architects and Marine Engineers and an officer in the United States Naval Reserve Force.

The **National Flue Cleaner Company,** Groveville, N. J., manufacturers of soot blowers for firetube boilers, has recently appointed the **Furnace Improvement Company,** Providence, R. I., representative in New England and the **Naylor-Hickey Corporation,** Chicago, Ill., representative in Chicago.

The executive offices of the **Worthington Pump & Machinery Corporation,** also its export sales department and New York district sales department have moved to 2 Park avenue, New York. The head office, sales and advertising departments have been moved to the Harrison plant of the corporation, located at 421 Worthington Avenue, Harrison, N. J.

The **Colgan Manufacturing & Supply Company** will move from its present location at 118-120 Maiden Lane, to new quarters at 8-10 Bridge street, New York. The Colgan Manufacturing & Supply Company is the sole manufacturer of Colganoil, a high grade marine lubricating oil, which has been in use for nearly 50 years.

Joseph S. Jones, vice president of, and for ten years associated with, **Charles Cory & Son, Inc.,** manufacturers of marine equipment, has resigned. He entered the service of this company as engineer and since that time has occupied the position of general commercial manager, assistant to president and general manager and vice president in charge of sales and engineering, which position he held up to April of this year when his resignation took effect. He has been responsible for the creation and development of various types of signal and communicating appliances, both for marine and industrial purposes.

Henry F. Schmidt, consulting engineer of the **Westinghouse Electric & Manufacturing Company,** South Philadelphia Works, has been recently awarded the medal of the **American Society of Naval Engineers** for the best article submitted during the year 1927. Mr. Schmidt, besides being awarded a gold medal, was given an honorary life membership in the society and a cash prize for his paper, entitled "Some Screw Propeller Experiments with Particular Reference to Pumps and Blowers." The presentation of the awards to Mr. Schmidt was made by Secretary of the Navy Wilbur at the annual dinner of the society which was held at the Willard Hotel, Washington, D. C.

Trade Publications

DIESEL YACHT CRESSIDA.—A booklet has been distributed by Cox and Stevens, New York giving a complete description of the seagoing auxiliary Diesel yacht *Cressida* built for Hermann Oelrichs.

GAS RANGES.—The Stamford Foundry Company, of Stamford, Conn., has issued a catalogue describing Shipmate gas ranges. These may be used on yachts and small vessels and are capable of doing all sorts of cooking including baking and broiling. The fuel, a non-poisonous gas, is contained in steel cylinders which are easily stored.

BOILERS.—The Hartford Steam Boiler Inspection and Insurance Company, Hartford, Conn., has issued the second edition of "The Boiler Book." This book contains some of the data most frequently required for the design and installation of boilers and other pressure vessels.

FUEL BURNING SYSTEMS.—A booklet giving a "Description of Peabody Fuel Burning Systems and Operating Instructions," has been published by the Peabody Engineering Corporation of New York. The Peabody-Fisher wide range oil burner, the Peabody gas burner and combined gas and oil burner as well as the pulverized coal burners are described.

AUXILIARY TURBINE GENERATOR UNITS.—The Westinghouse Electric and Manufacturing Company, South Philadelphia, Pa., has recently released a leaflet No. 20-338 describing marine auxiliary turbine generators. The leaflet covers units of 5 to 15 kilowatts capacity for direct current operation, using direct connected turbines. This leaflet also describes geared turbine generator units for alternating current service in ratings from 25 up to and including 500 kilowatts.

NICKEL CAST IRON.—Bulletin No. 205, the fifth of a series on nickel cast iron, has been published by the International Nickel Company of New York. The article entitled "The Practical and Economic Value of Nickel and Chromium in Gray Cast Iron," was written by D. M. Houston. A comparison of costs and savings for various alloys is given.

GAS CUTTING.—A pamphlet issued by the Air Reduction Sales Company of New York, entitled "Factors Involved in Economical Gas Cutting," by J. L. Anderson, has been received. While the author did not undertake to give a complete analysis of all the factors involved in cutting, he has covered those of most importance to the average user of the cutting process.

DIESEL ENGINES.—A bulletin describing the new type Winton Diesel engine has been issued by the Winton Engine Company of Cleveland, Ohio. The installation of two of these engines in the 94-foot cruiser-houseboat *Nicoya* owned by F. B. Lovejoy marks the introduction of this engine in the first known Diesel powered houseboat.

BURNERS.—A pamphlet entitled "What's New" has been distributed by the Peabody Engineering corporation of New York. New equipment manufactured by this concern is described in this booklet. Among the new types of products are the "Toronto" powdered coal burner, the insulated burner front, oil burners, combined gas and oil burners and a new automatic viscosity regulator.

Marine Societies

America

American Marine Association. 30 Church St., New York. President—Col. E. A. Simmons.

American Marine Standards Committee. Chairman, Colonel E. A. Simmons. Secretary, A. V. Bouillon, Division of Simplified Practice, Department of Commerce, Washington, D. C.

American Society of Marine Designers. Secretary—B. G. Barnes, 202 Kendrick Ave., Quincy, Mass.

American Society of Marine Engineers. 605 Market St., San Francisco, Calif. President—Henry F. Gelhaus. Secretary—Wm. H. Thille.

American Society of Naval Engineers. Navy Department, Washington, D. C. Secretary Treasurer—Commander H. B. Hird, U. S. N., Bureau of Engineering, Navy Department, Washington, D. C.

American Steamship Owners' Association. 11 Broadway, New York. President—H. B. Walker.

Atlantic Coast Shipbuilders' Association. 1600 Walnut Street, Philadelphia, Pa. Secretary—C. S. King.

Council of American Shipbuilders, Inc. 50 Broadway, New York. President—Homer L. Ferguson. Secretary-Treasurer—Henry C. Hunter.

Jersey Marine Club. 4th and River Streets, Hoboken, N. J. Secretary—Fred L. Broad.

Lake Carriers' Association. President—J. S. Ashley. Secretary—George A. Marr, Rockefeller Building, Cleveland, O.

National Association of Engine and Boat Manufacturers. 29 West 39th Street, New York City. Secretary—Ira Hand.

National Association of Masters, Mates and Pilots. National Secretary—M. D. Tenniswood, 308 Vine St., Camden, N. J.

National Marine Engineers' Beneficial Association. Headquarters 311-315 Machinists Building, Washington, D. C. President—Wm. F. Yates. Secretary—Albert L. Jones.

Neptune Association. 21 Pearl St., New York City. Secretary-Treasurer—Captain John F. Milliken.

New York and New Jersey Dry Dock Association. 111 Broadway, New York. President—Jonathan Moore.

Ocean Association of Marine Engineers. 15 Whitehall St., New York. Secretary—Bert L. Todd.

Port of New York Authority. 75 West Street, New York. Chairman—George S. Silzer. Secretary—Wilson J. Vance.

Society of Naval Architects and Marine Engineers. 29 West 39th Street, New York. Secretary and Treasurer—Daniel H. Cox.

The Maritime Association of the Port of New York. 78 Broad St., New York City. President—John Dowd. Secretary—John F. Manning.

The New York Tow Boat Exchange. 11 Moore St., New York. Manager—Langdon W. Smith.

The Propeller Club of the Port of New York. President—Harry W. Parsons, 111 Broadway, New York. Secretary—W. Z. Gardner, 136 Liberty Street, New York.

United States Naval Institute. Naval Academy, Annapolis, Md. Secretary and Treasurer—Captain H. A. Baldridge, U. S. N.

United States Ship Operators' Association. 149 Broadway, New York. President—Winchester Noyes.

Canada

Grand Council N. A. of M. E. of Canada. Grand Secretary-Treasurer—W. A. MacDonald, 62 Albert St., Halifax, N. S.

Great Britain

Institute of Marine Engineers, Incorporated. 85/88 The Minories, London, E.1.

Institution of Engineers and Shipbuilders in Scotland. 39 Elmbank Crescent, Glasgow.

Institution of Naval Architects. 5 Adelphi Terrace, London, W. C.

North East Coast Institution of Engineers and Shipbuilders. Bolbec Hall, Westgate Road, Newcastle-on-Tyne.

France

Association Technique Maritime et Aéronautique. Secrétariat Général—7, rue de Madrid, Paris (8e).

Italy

Collegio Degli Ingegneri Naval e Meccanici in Italia.

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

JUNE, 1928

Marine Engineering and Shipping Age

COLUMBIAN

TOW-RO

PURE MANILA ROPE

I can give you every advantage you can find in any Tow Line on the market today, plus some special advantages which are exclusive to me. Here's what I offer you:—

I can be easily spliced.
I am Guaranteed by the Columbian *Tape-Marker*.
I bear every strain uniformly because of my large heart, composed of slightly twisted fibre.
I am thoroughly waterproofed.
I retain my form in the sea or out.
I have flexibility without distortion.

So that all will know me I plainly show my Columbian colors in the order of Red, Blue and Red. I am

Columbian Tow-Ro
(TOW ROPE)

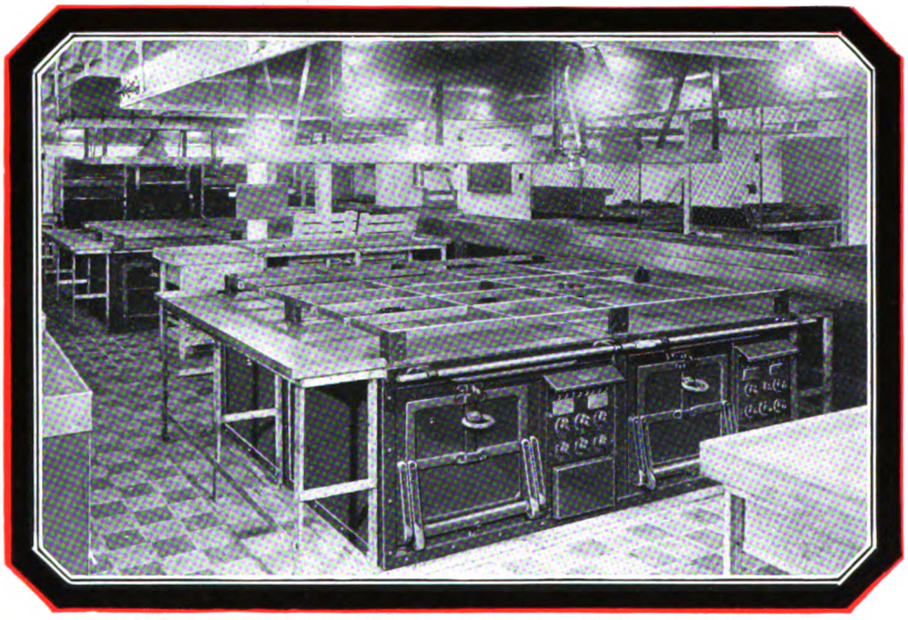
COLUMBIAN ROPE COMPANY
Auburn, N. Y. *"The Cordage City"*
New York Boston New Orleans Chicago

35 CENTS A COPY

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Aboard the S.S. MALOLO

Economy of EDISON Electric Cooking and Baking Equipment has been PROVED



Main Galley of S. S. Malolo showing compact arrangement of Edison Electric Ranges

Actual operation on board the S. S. Malolo demonstrates these six advantages of Edison Electric Equipment:

1. Lower Operating Cost.
2. Saving in Deck Space.
3. Better Galley Ventilation.
4. Less Upkeep Costs.
5. Absolute Dependability.
6. No Fire Risk.

Lower Operating Cost: Although in operation only a few months, Edison Electric Cooking and Baking Equipment installed on the S. S. Malolo, operated by the Matson Navigation Company, has definitely proved its economy. Food is cooked at an amazingly low price, far less than was anticipated. The cost of electric energy per person per meal was only 4.8 mills. This low cost is due to excellent operation and the fact that electricity for cooking is supplied by the same generators serving the rest of the ship. The cooking load was only 25% of the total electric load. The cooking and baking load is mostly off the peak of the lighting load of the ship.

Saving in Deck Space: The equipment on the S. S. Malolo is compactly arranged in galleys much smaller than if coal or oil were used for fuel.

Better Galley Ventilation: On the trial trip of the Malolo through the tropic Caribbean Sea, the temperature in the galleys was at no time unbearable. Chefs who have made trips through the same zone with other equipment marveled at the comparatively low temperature of the galleys.

Less Upkeep Costs: Installed in hundreds of ships, Edison Electric Equipment has demonstrated its ability to stand up under the most severe service. The rugged simplicity of this equipment assures long, active service.

Calrod Unit Dependability: Edison Heavy-Duty Ranges are equipped with the famous Calrod Heating Element. This unit, cast in solid iron, is practically indestructible. Many Calrod units have seen more than ten years' service aboard ship without burning out. Range top will not sag or break.

No Fire Risk: With electricity, possibility of grease and back-draft fires is eliminated.

The complete story on the operation of Edison Electric Equipment on the Malolo will be mailed on request.

Operating Data of Edison Equipment on S. S. Malolo

Ratio of Galley Load to Total Load	24.5%
Meals Served	105,469
Cost per person per meal for electricity	48/100ths of a cent

EDISON ELECTRIC APPLIANCE CO., Inc.

5666 West Taylor Street, Chicago, Ill.

Factories: Chicago, Illinois, and Ontario, California

Chicago Boston Cleveland Kansas City New York Atlanta Charlotte Denver

A GENERAL ELECTRIC ORGANIZATION

(In Canada: Canadian General Electric Co., Ltd., Toronto)

Salt Lake City Portland San Francisco Seattle Los Angeles Dallas Ontario, Calif.

Vol. XXXIII No. 6

Published monthly by Simmons-Boardman Publishing Company, 34 North Crystal Street, East Stroudsburg, Pa. Entered as second class matter, March 15, 1928, at the post office at East Stroudsburg, Pa., under act of March 3, 1879.

Generated on 2024-09-12 14:26 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

JULY, 1928

JUL 2 1928

Marine Engineering and Shipping Age

IN TURBINE WORK

There Is No Substitute for Experience

THE Jones-White Shipping Act has given our Marine Industry a new lease of life. A steady increase in American shipbuilding on a profitable basis is anticipated.

When turbine work is considered bear in mind that the long experience of the Capstaff-Hunter organization will save you time and money and give positive assurance of satisfactory work.

This organization has time and time again handled some of the largest turbine jobs in record time. Economy through efficiency is the basis of Capstaff-Hunter service supported by a modernly equipped shop and well organized crews of specialists.

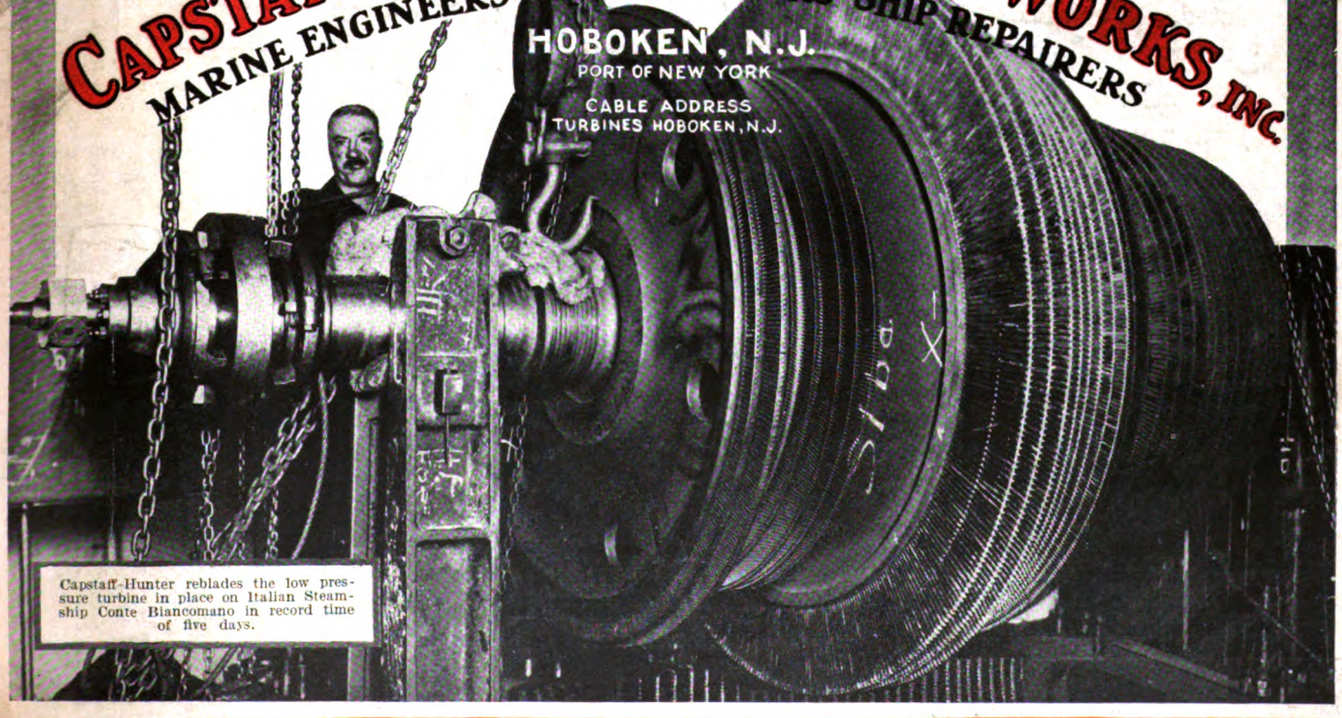
Capstaff-Hunter carries the largest stock of Parsons turbine material in America, besides a large assortment of blading for the various other makes. Repairs can be made at any port or on ships at sea—write—phone or wire—Capstaff-Hunter is at your service.

CAPSTAFF-HUNTER TURBINE WORKS, INC.

MARINE ENGINEERS · BOILERMAKERS · SHIP REPAIRERS

HOBOKEN, N.J.
PORT OF NEW YORK

CABLE ADDRESS
TURBINES HOBOKEN, N.J.



Capstaff-Hunter reblades the low pressure turbine in place on Italian Steamship Conte Biancomano in record time of five days.

Generated on 2024-09-12 14:18 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Let TRU-LAY ROPE cut your cable costs!

TRU-LAY Preformed Wire Rope cuts cable costs because it lasts longer in service.

Preformed construction—that's the secret back of TRU-LAY'S superiority. The preformed principle eliminates internal stress and makes the rope cut and handle like a steel bar.

Every wire is *laid* in place—not twisted. All of the strength of all of the wires is utilized. No seizing is required—there is no wastage from frayed ends.

If you want more from your wire-rope money—it will pay you to investigate TRU-LAY. Test its preformed construction. Your name and address will bring a free sample.

A large cable-user prefers TRU-LAY because it isn't as stiff as other ropes and is much easier to reeve on the boom. "When other rope breaks," he writes, "it flies in all directions. TRU-LAY lies perfectly still, does not fly apart and retains its full salvage value. TRU-LAY gives us at least 50 per cent more service, too." You will prefer TRU-LAY Preformed Wire Rope once you have made a convincing test. Your name and address bring a free sample.

AMERICAN CABLE COMPANY, INCORPORATED
Grand Central Terminal Building, New York, N. Y.
District Offices: Chicago, Detroit, Philadelphia, Pittsburgh, Tulsa, San Francisco
An Associate Company of the American Chain Company, *Incorporated*
Dominion Wire Rope Company, *Limited*, Montreal, Sole Canadian Licensed Manufacturers

ACCO — An Associate Company of American Chain Company, Inc. In business for Your Safety

PREFORMED WIRE ROPE

TRADE **TRU-LAY** MARK

[REG. U. S. PAT. OFF.]

Vol. XXXIII No. 7
Published monthly by Simmons-Boardman Publishing Company, 34 North Crystal Street, East Stroudsburg, Pa. Entered as second class matter, March 15, 1928, at the post office at East Stroudsburg, Pa., under the act of March 3, 1879.

Generated on 2024-09-12 14:27 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

AUGUST, 1928

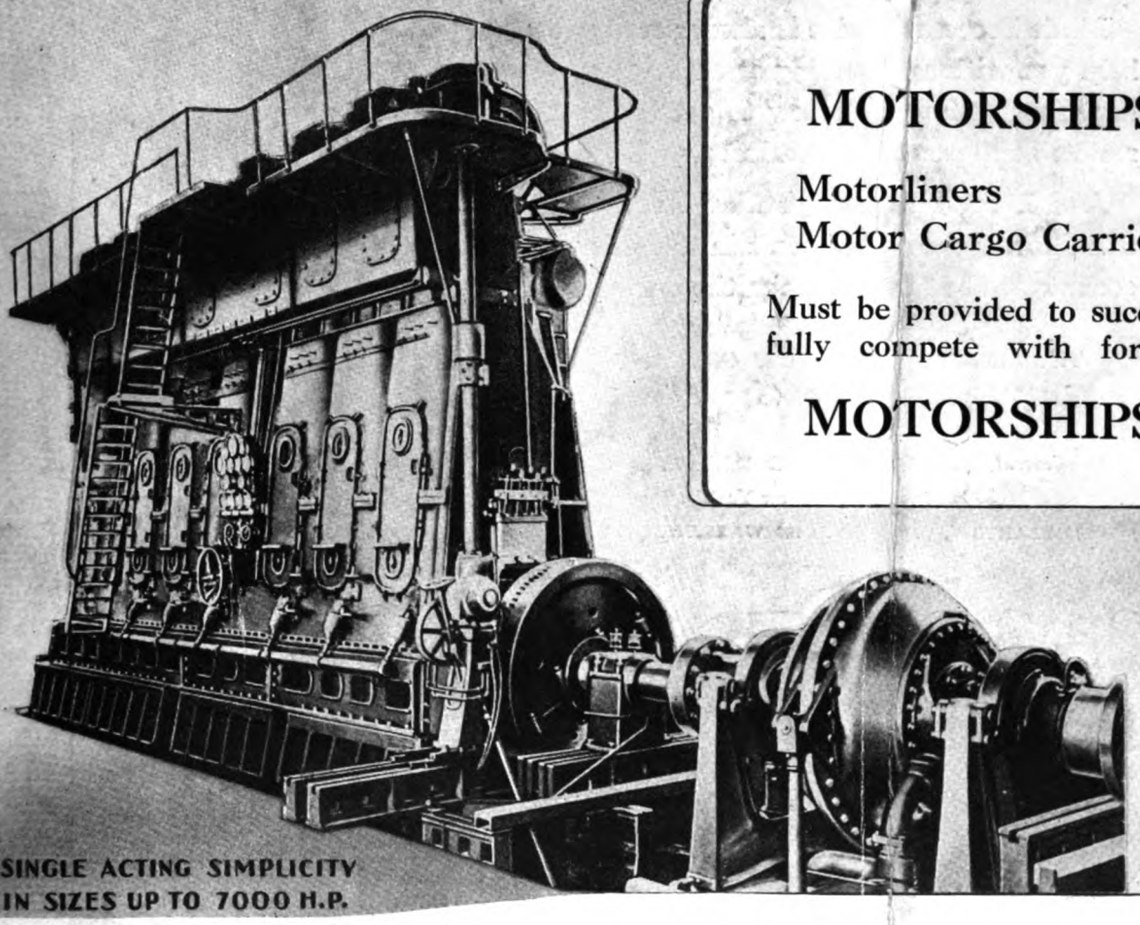
AUG 1 1928

Marine Engineering and Shipping Age

BUSCH-SULZER

TWO-CYCLE

DIESEL MARINE ENGINES



SINGLE ACTING SIMPLICITY
IN SIZES UP TO 7000 H.P.

MOTORSHIPS

Motorliners
Motor Cargo Carriers

Must be provided to successfully compete with foreign

MOTORSHIPS

BUSCH-SULZER BROS.—DIESEL ENGINE CO.
ST. LOUIS, MO.

TWO RECTOR ST.
NEW YORK

RIALTO BLDG.
SAN FRANCISCO

35 CENTS A COPY

Generated on 2024-09-12 14:14 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

stated that though in some cases the cost of arc welding has exceeded the cost of riveting, not only in structural work but in the manufacture of steel pipe, tanks, girders, etc., a recent discovery by the research laboratories of The Lincoln Electric Company of a new welding process known as the electronic tornado has been perfected to such a degree that present welding costs can be reduced 75 percent by the new process.

Business and Personal

The second issue of *The Auroco News* has been received from the **Automotive Royalties Corporation, Inc.,** New York City. This pamphlet is devoted to the publication of information concerning various new inventions and newly manufactured products in the automotive field.

The **Builders & Industrial Supply Company,** Toledo, Ohio, is handling the various products of the **Botfield Refactories** Company, Philadelphia, Pa., in the vicinity of Toledo, Ohio..

The marine department of the **J. L. Mott Iron Works** has moved its office, show room and warehouse to 96 Pine street, New York.

Due to a marked increase in business during the past year, the **Peabody Engineering Corporation,** 110 East 42nd street, New York, has increased its engineering personnel and has leased additional space at its New York office.

The **Williams Steamship Company, Inc.,** which operates a service from New York to Pacific coast ports, has removed its berth from Pier 1, Erie Basin to the foot of 30th street, Brooklyn, N. Y.

The Boston office of **Sanderson & Son,** agents for the **Royal Mail, Lamport & Holt** and **Pacific Steam Navigation Lines,** has been closed and the business will be handled by the Boston office of the **International Mercantile Marine Company.**

T. Ishitani, former manager of the Calcutta branch office of the **Nippon Yusen Kaisha,** has been appointed manager of the New York office of the line, succeeding **S. Sakamoto,** who is returning to Japan.

Trade Publications

WINCHES. — The Stimmel Winch & Machine Works, New York, has distributed a group of folders in which truck winches, derrick and boat winches are described as well as capstans for various purposes.

ELECTRICAL EQUIPMENT.—A group of bulletins covering turbines, generator motors, switches and controls have been distributed by the General Electric Company, Schenectady, N. Y.

WELDING EQUIPMENT.—A folder has been received from the Fusion Welding Corporation of Chicago in which the merits of the Fuzon welder are explained.

CASTINGS. — The Peerless Products Company of New York has issued a pamphlet describing their ability to manufacture small and ornamental castings.

STARTERS.—The Monitor Controller Company, Baltimore, Md., has issued price lists and part lists covering standard and junior size Monitor thermaload starters.

HEAT ENGINEERING. — The Foster Wheeler Corporation of New York has published the bulletin "Heat Engineering" in which the installation of jet condensers on the Great Lakes car ferry *Wabash* is described.

LUBRICATION.—The Texas Company, New York, has described the factors involved in lubricating the steam turbine in the March, 1928, issue of "Lubrication" a technical publication devoted to the selection and use of lubricants.

HARDWARE.—A catalogue of marine hardware and general ship chandlers goods has been received from DeGrauw, Aymar & Company, New York, in which numerous articles of nautical application are described with current prices.

COMPRESSORS. — The Ingersoll-Rand Company, New York, has published a new 44-page bulletin on ER and FR compressors and vacuum pumps. These are the small and intermediate size machines produced by the company.

ALLOY STEEL.—The International Nickel Company, New York, has published an article entitled "Alloy Steel for Boiler Construction" by Charles McKnight. This paper points out the fact that nickel steel offers many advantages in the modern trend toward higher operating temperatures and pressures in boilers.

S. S. MERCER.—A souvenir booklet descriptive of the first ocean voyage of any vessel under power produced by pulverized coal has been issued by the Kennedy-Van Suan Manufacturing & Engineering Corporation, New York.

ABRASIVE METAL.—Alumalun, Feralun and Bronzalun are described in a pamphlet entitled "For Safety Sea Legs" issued by the American Abrasive Metals Company, New York. These products are used for antislip treads and floor plates where the danger of slippage is present.

FOAMITE—The American La France & Foamite Corporation, Utica, N. Y., has published a bulletin entitled "Needless Ruin" which describes an installation of the Foamite foam generator and the Foamite generator system, as applied to the protection of boats against fire.

PACKING. — The National Asbestos Packing Manufacturing Company, Inc., New York, has issued a catalogue of various packings for use with steam, gas, air, water and ammonia. The application of National packing has proved satisfactory for marine and stationary boilers, engines and pumps.

RUBBER BEARINGS.—The B. F. Goodrich Rubber Company, Akron, Ohio, has issued a pamphlet describing the cutless rubber stern and strut bearings which are manufactured to take the place of the customary metal or lignum vitae propeller shaft bearings without change in size. They are lubricated entirely by water, and will not score the shaft.

Marine Societies

America

American Marine Association, 30 Church St., New York. President—Col. E. A. Simmons.

American Marine Standards Committee. Chairman, Colonel E. A. Simmons. Secretary, A. V. Bouillon, Division of Simplified Practice, Department of Commerce, Washington, D C.

American Society of Marine Designers. Secretary—B. G. Barnes, 202 Kendrick Ave., Quincy, Mass.

American Society of Marine Engineers. 605 Market St., San Francisco, Calif. Presiednt—Henry F. Gelhaus. Secretary—W. H. Thille.

American Society of Naval Engineers. Navy Department, Washington, D. C. Secretary Treasurer & Commander H. B. Hird, U. S. N., Bureau of Engineering, Navy Department, Washington, D. C.

American Steamship Owners' Association, 11 Broadway, New York. President—H. B. Walker.

Atlantic Coast Shipbuilders' Association. 1600 Walnut Street, Philadelphia, Pa. Secretary—C. S. King.

Council of American Shipbuilders, Inc., 50 Broadway, New York. President—Homer L. Ferguson. Secretary-Treasurer—Henry C. Hunter.

Jersey Marine Club, 4th and River Streets, Hoboken, N. J. Secretary—Fred L. Broad.

Lake Carriers' Association. President J. S. Ashley. Secretary—George A. Marr, Rockefeller Building Cleveland O.

National Association of Engine and Boat Manufacturers, 29 West 39th Street, New York City. Secretary—Ira Hand.

National Association of Masters, Mates and Pilots, National Secretary—M. D. Tenniswood, 308 Vine St., Camden, N. J.

National Marine Engineers' Beneficial Association. Headquarterse 311-315 Machinists Build-Ing, Washington, D. C. Prsident—Wm. F. Yates. Secretary—Albert L. Jones.

Neptune Association, 21 Pearl St., New York City. Secretary-Treasurer—Captain John F. Mil'iken.

New York and New Jersey Dry Dock Association. 111 Broadway, New York. President—Jonathan Moore.

Ocean Association of Marine Engineers. 15 Whitehall St., New York. Secretary—Bert L. Todd.

Port of New York Authority, 75 West Street, New York. Chairman—George S. Silzer. Secretary—Wilson J. Vance.

Society of Naval Architects and Marine Engineers, 29 West 39th Street, New York. Secretary and Treasurer—Daniel H. Cox.

The Maritime Association of the Port of New York, 78 Broad St., New York City President—John Dowd Secretary—John F. Manning.

The New York Tow Boat Exchange 11 Moore St., New York. Manager—Langdon W. Smith.

The Propeller Club of the Port of New York. President—Harry W. Parsons, 111 Broadway, New York. Secretary—W. Z. Gardner, 136 Liberty Street, New York.

United States Naval Institute. Naval Academy, Annapolis, Md. Secretary and Treasurer—Captain H. A. Baldridge, U. S. N.

United States Ship Operators' Association, 149 Broadway, New York. President—Winchester Noyes.

Canada

Grand Council N. A. of M. E. of Canada. Grand Secretary-Treasurer—W. A. MacDonald 62 Albert St, Halifax N. S:

Great Britain

Institute of Marine Engineers Incorporated, 85-88 The Minories, London E.1.

Institution of Engineers and Shipbuilders in Scotland, 39 Elmbank Crescent, Glasgow.

Institution of Naval Architects, 5 Adelphi Terrace, London, W. C.

North East Coast Institution of Engineers and Shipbuilders. Bolbec Hall, Westgate Road, Newcastle-on-Tyne.

France

Association Technique Maritime et Aëronautique. Secrétariat Genéral—7, rue de Madrid, Paris (8e).

Italy

Collegio Degli Ingegneri Naval e Meccanici In Italia.

Generated on 2024-09-12 14:15 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

AUGUST, 1928

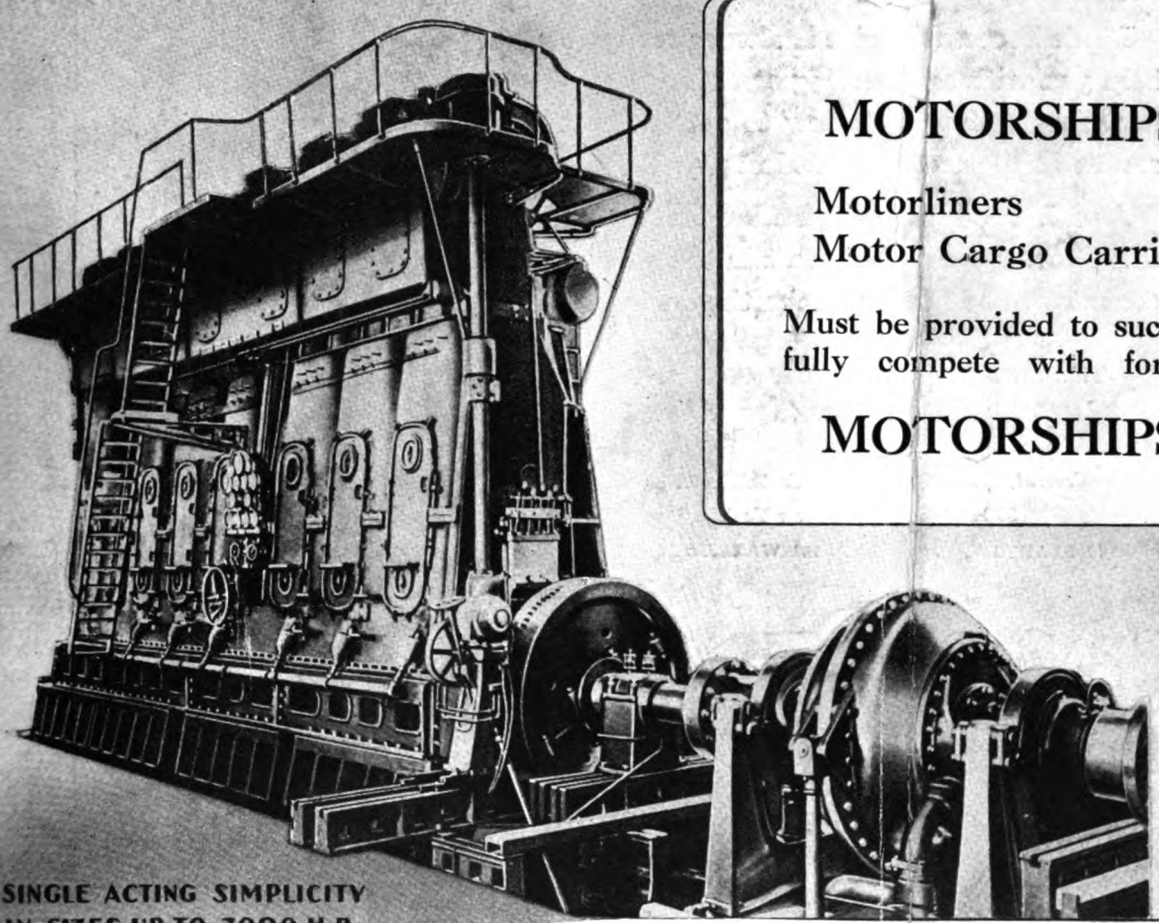
Marine Engineering

and Shipping Age

BUSCH-SULZER

TWO-CYCLE

DIESEL MARINE ENGINES



SINGLE ACTING SIMPLICITY
IN SIZES UP TO 7000 H.P.

MOTORSHIPS

Motorliners
Motor Cargo Carriers

Must be provided to successfully compete with foreign

MOTORSHIPS

BUSCH-SULZER BROS.—DIESEL ENGINE CO.

ST. LOUIS, MO.

TWO RECTOR ST.
NEW YORK

RIALTO BLDG.
SAN FRANCISCO

Generated on 2024-09-12 14:59 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

stated that though in some cases the cost of arc welding has exceeded the cost of riveting, not only in structural work but in the manufacture of steel pipe, tanks, girders, etc., a recent discovery by the research laboratories of The Lincoln Electric Company of a new welding process known as the electronic tornado has been perfected to such a degree that present welding costs can be reduced 75 percent by the new process.

Business and Personal

The second issue of *The Auroco News* has been received from the **Automotive Royalties Corporation, Inc.,** New York City. This pamphlet is devoted to the publication of information concerning various new inventions and newly manufactured products in the automotive field.

The **Builders & Industrial Supply Company,** Toledo, Ohio, is handling the various products of the **Botfield Refactories** Company, Philadelphia, Pa., in the vicinity of Toledo, Ohio..

The marine department of the **J. L. Mott Iron Works** has moved its office, show room and warehouse to 96 Pine street, New York.

Due to a marked increase in business during the past year, the **Peabody Engineering Corporation,** 110 East 42nd street, New York, has increased its engineering personnel and has leased additional space at its New York office.

The **Williams Steamship Company, Inc.,** which operates a service from New York to Pacific coast ports, has removed its berth from Pier 1, Erie Basin to the foot of 30th street, Brooklyn, N. Y.

The Boston office of **Sanderson & Son,** agents for the **Royal Mail, Lamport & Holt** and **Pacific Steam Navigation Lines,** has been closed and the business will be handled by the Boston office of the **International Mercantile Marine Company.**

T. Ishitani, former manager of the Calcutta branch office of the **Nippon Yusen Kaisha,** has been appointed manager of the New York office of the line, succeeding **S. Sakamoto,** who is returning to Japan.

Trade Publications

WINCHES. — The Stimmel Winch & Machine Works, New York, has distributed a group of folders in which truck winches, derrick and boat winches are described as well as capstans for various purposes.

ELECTRICAL EQUIPMENT.—A group of bulletins covering turbines, generator motors, switches and controls have been distributed by the General Electric Company, Schenectady, N. Y.

WELDING EQUIPMENT.—A folder has been received from the Fusion Welding Corporation of Chicago in which the merits of the Fuzon welder are explained.

CASTINGS. — The Peerless Products Company of New York has issued a pamphlet describing their ability to manufacture small and ornamental castings.

STARTERS.—The Monitor Controller Company, Baltimore, Md., has issued price lists and part lists covering standard and junior size Monitor thermaload starters.

HEAT ENGINEERING. — The Foster Wheeler Corporation of New York has published the bulletin "Heat Engineering" in which the installation of jet condensers on the Great Lakes car ferry *Wabash* is described.

LUBRICATION.—The Texas Company, New York, has described the factors involved in lubricating the steam turbine in the March, 1928, issue of "Lubrication" a technical publication devoted to the selection and use of lubricants.

HARDWARE.—A catalogue of marine hardware and general ship chandlers goods has been received from DeGrauw, Aymar & Company, New York, in which numerous articles of nautical application are described with current prices.

COMPRESSORS. — The Ingersoll-Rand Company, New York, has published a new 44-page bulletin on ER and FR compressors and vacuum pumps. These are the small and intermediate size machines produced by the company.

ALLOY STEEL.—The International Nickel Company, New York, has published an article entitled "Alloy Steel for Boiler Construction" by Charles McKnight. This paper points out the fact that nickel steel offers many advantages in the modern trend toward higher operating temperatures and pressures in boilers.

S. S. MERCER.—A souvenir booklet descriptive of the first ocean voyage of any vessel under power produced by pulverized coal has been issued by the Kennedy-Van Suan Manufacturing & Engineering Corporation, New York.

ABRASIVE METAL.—Alumalun, Feralun and Bronzalun are described in a pamphlet entitled "For Safety Sea Legs issued by the American Abrasive Metals Company, New York. These products are used for antislip treads and floor plates where the danger of slippage is present.

FOAMITE—The American La France & Foamite Corporation, Utica, N. Y., has published a bulletin entitled "Needless Ruin" which describes an installation of the Foamite foam generator and the Foamite generator system, as applied to the protection of boats against fire.

PACKING. — The National Asbestos Packing Manufacturing Company, Inc., New York, has issued a catalogue of various packings for use with steam, gas, air, water and ammonia. The application of National packing has proved satisfactory for marine and stationary boilers, engines and pumps.

RUBBER BEARINGS.—The B. F. Goodrich Rubber Company, Akron, Ohio, has issued a pamphlet describing the cutless rubber stern and strut bearings which are manufactured to take the place of the customary metal or lignum vitae propeller shaft bearings without change in size. They are lubricated entirely by water, and will not score the shaft.

Marine Societies

America

American Marine Association, 30 Church St., New York. President—Col. E. A. Simmons.

American Marine Standards Committee. Chairman, Colonel E. A. Simmons. Secretary, A. V. Bouillon, Division of Simplified Practice, Department of Commerce, Washington, D C.

American Society of Marine Designers. Secretary—B. G. Barnes, 202 Kendrick Ave., Quincy, Mass.

American Society of Marine Engineers. 605 Market St., San Francisco, Calif. Presiednt—Henry F. Gelhaus. Secretary—W. H. Thille.

American Society of Naval Engineers. Navy Department, Washington, D. C. Secretary Treasurer & Commander H. B. Hird, U. S. N., Bureau of Engineering, Navy Department, Washington, D. C.

American Steamship Owners' Association, 11 Broadway, New York. President—H. B. Walker.

Atlantic Coast Shipbuilders' Association. 1600 Walnut Street, Philadelphia, Pa. Secretary—C. S. King.

Council of American Shipbuilders, Inc., 50 Broadway, New York. President—Homer L. Ferguson. Secretary-Treasurer—Henry C. Hunter.

Jersey Marine Club, 4th and River Streets, Hoboken, N. J. Secretary—Fred L. Broad.

Lake Carriers' Association. President J. S. Ashley. Secretary—George A. Marr, Rockefeller Building Cleveland O.

National Association of Engine and Boat Manufacturers, 29 West 39th Street, New York City. Secretary—Ira Hand.

National Association of Masters, Mates and Pilots, National Secretary—M. D. Tenniswood, 308 Vine St., Camden, N. J.

National Marine Engineers' Beneficial Association. Headquarterse 311-315 Machinists Build-Ing, Washington, D. C. Prsident—Wm. F. Yates. Secretary—Albert L. Jones.

Neptune Association, 21 Pearl St., New York City. Secretary-Treasurer—Captain John F. Milliken.

New York and New Jersey Dry Dock Association. 111 Broadway, New York. President—Jonathan Moore.

Ocean Association of Marine Engineers. 15 Whitehall St., New York. Secretary—Bert L. Todd.

Port of New York Authority, 75 West Street, New York. Chairman—George S. Silzer. Secretary—Wilson J. Vance.

Society of Naval Architects and Marine Engineers, 29 West 39th Street, New York. Secretary and Treasurer—Daniel H. Cox.

The Maritime Association of the Port of New York, 78 Broad St., New York City President—John Dowd Secretary—John F. Manning.

The New York Tow Boat Exchange 11 Moore St., New York. Manager—Langdon W. Smith.

The Propeller Club of the Port of New York. President—Harry W. Parsons, 111 Broadway, New York. Secretary—W. Z. Gardner, 136 Liberty Street, New York.

United States Naval Institute. Naval Academy, Annapolis, Md. Secretary and Treasurer—Captain H. A. Baldridge, U. S. N.

United States Ship Operators' Association, 149 Broadway, New York. President—Winchester Noyes.

Canada

Grand Council N. A. of M. E. of Canada. Grand Secretary-Treasurer—W. A. MacDonald 62 Albert St, Halifax N. S:

Great Britain

Institute of Marine Engineers Incorporated, 85-88 The Minories, London E.1.

Institution of Engineers and Shipbuilders in Scotland, 39 Elmbank Crescent, Glasgow.

Institution of Naval Architects, 5 Adelphi Terrace, London, W. C.

North East Coast Institution of Engineers and Shipbuilders. Bolbec Hall, Westgate Road, Newcastle-on-Tyne.

France

Association Technique Maritime et Aëronautique. Secrétariat Genéral—7, rue de Madrid, Paris (8e).

Italy

Collegio Degli Ingegneri Naval e Meccanici In Italia.

Generated on 2024-09-12 14:16 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

AUGUST, 1928

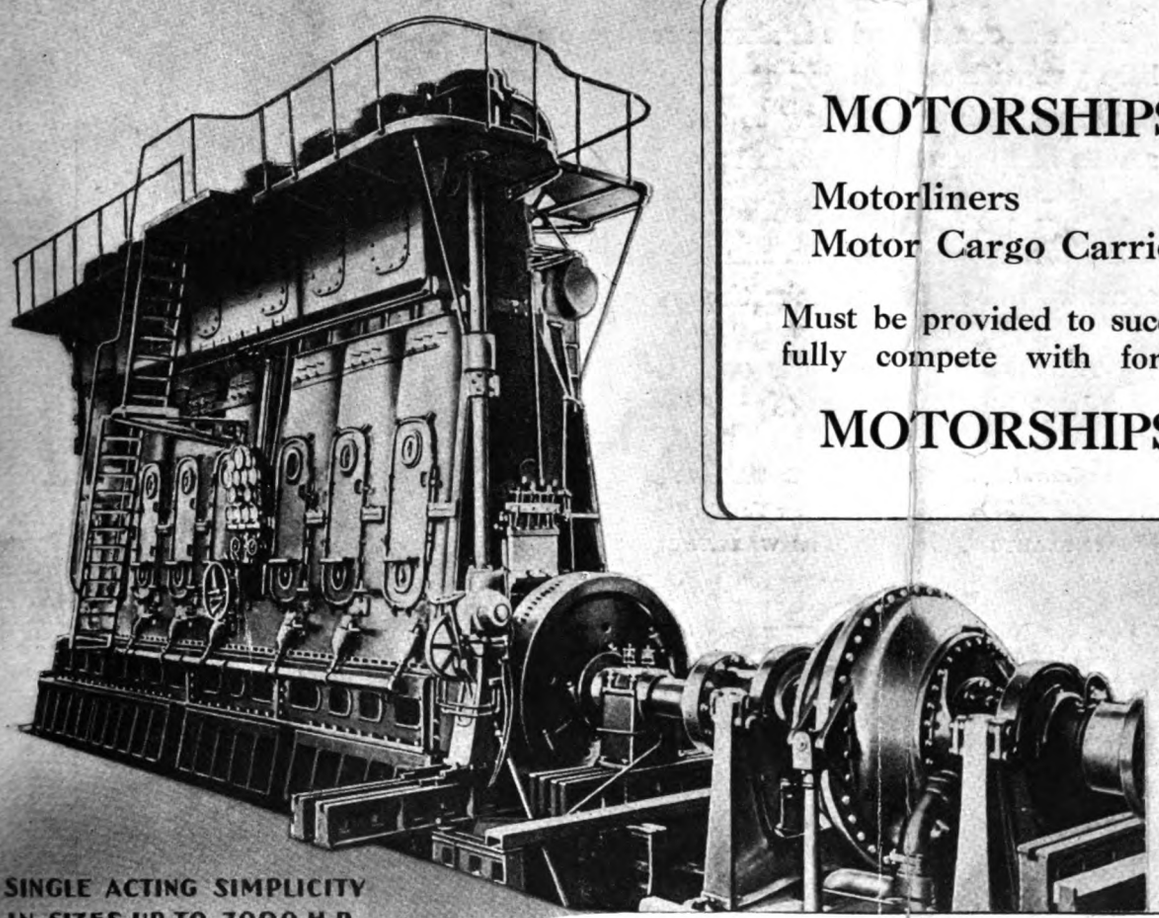
Marine Engineering

and Shipping Age

BUSCH-SULZER

TWO-CYCLE

DIESEL MARINE ENGINES



SINGLE ACTING SIMPLICITY
IN SIZES UP TO 7000 H.P.

MOTORSHIPS

Motorliners
Motor Cargo Carriers

Must be provided to successfully compete with foreign

MOTORSHIPS

BUSCH-SULZER BROS.—DIESEL ENGINE CO.

ST. LOUIS, MO.

TWO RECTOR ST.
NEW YORK

RIALTO BLDG.
SAN FRANCISCO

Generated on 2024-09-12 14:14 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

stated that though in some cases the cost of arc welding has exceeded the cost of riveting, not only in structural work but in the manufacture of steel pipe, tanks, girders, etc., a recent discovery by the research laboratories of The Lincoln Electric Company of a new welding process known as the electronic tornado has been perfected to such a degree that present welding costs can be reduced 75 percent by the new process.

Business and Personal

The second issue of *The Auroco News* has been received from the **Automotive Royalties Corporation, Inc.,** New York City. This pamphlet is devoted to the publication of information concerning various new inventions and newly manufactured products in the automotive field.

The **Builders & Industrial Supply Company,** Toledo, Ohio, is handling the various products of the **Botfield Refactories** Company, Philadelphia, Pa., in the vicinity of Toledo, Ohio..

The marine department of the **J. L. Mott Iron Works** has moved its office, show room and warehouse to 96 Pine street, New York.

Due to a marked increase in business during the past year, the **Peabody Engineering Corporation,** 110 East 42nd street, New York, has increased its engineering personnel and has leased additional space at its New York office.

The **Williams Steamship Company, Inc.,** which operates a service from New York to Pacific coast ports, has removed its berth from Pier 1, Erie Basin to the foot of 30th street, Brooklyn, N. Y.

The Boston office of **Sanderson & Son,** agents for the **Royal Mail, Lamport & Holt** and **Pacific Steam Navigation Lines,** has been closed and the business will be handled by the Boston office of the **International Mercantile Marine Company.**

T. Ishitani, former manager of the Calcutta branch office of the **Nippon Yusen Kaisha,** has been appointed manager of the New York office of the line, succeeding **S. Sakamoto,** who is returning to Japan.

Trade Publications

WINCHES. — The Stimmel Winch & Machine Works, New York, has distributed a group of folders in which truck winches, derrick and boat winches are described as well as capstans for various purposes.

ELECTRICAL EQUIPMENT.—A group of bulletins covering turbines, generator motors, switches and controls have been distribu'ed by the General Electric Company, Schenectady, N. Y.

WELDING EQUIPMENT.—A folder has been received from the Fusion Welding Corporation of Chicago in which the merits of the Fuzon welder are explained.

CASTINGS. — The Peerless Products Company of New York has issued a pamphlet describing their ability to manufacture small and ornamental castings.

STARTERS.—The Monitor Controller Company, Baltimore, Md., has issued price lists and part lists covering standard and junior size Monitor thermaload starters.

HEAT ENGINEERING. — The Foster Wheeler Corporation of New York has published the bulletin "Heat Engineering" in which the installation of jet condensers on the Great Lakes car ferry *Wabash* is described.

LUBRICATION.—The Texas Company, New York, has described the factors involved in lubricating the steam turbine in the March, 1928, issue of "Lubrication" a technical publication devoted to the selection and use of lubricants.

HARDWARE.—A catalogue of marine hardware and general ship chandlers goods has been received from DeGrauw, Aymar & Company, New York, in which numerous articles of nautical application are described with current prices.

COMPRESSORS. — The Ingersoll-Rand Company, New York, has published a new 44-page bulletin on ER and FR compressors and vacuum pumps. These are the small and intermediate size machines produced by the company.

ALLOY STEEL.—The International Nickel Company, New York, has published an article entitled "Alloy Steel for Boiler Construction" by Charles McKnight. This paper points out the fact that nickel steel offers many advantages in the modern trend toward higher operating temperatures and pressures in boilers.

S. S. MERCER.—A souvenir booklet descriptive of the first ocean voyage of any vessel under power produced by pulverized coal has been issued by the Kennedy-Van Suan Manufacturing & Engineering Corporation, New York.

ABRASIVE METAL.—Alumalun, Feralun and Bronzalun are described in a pamphlet entitled "For Safety Sea Legs issued by the American Abrasive Metals Company, New York. These products are used for antislip treads and floor plates where the danger of slippage is present.

FOAMITE—The American La France & Foamite Corporation, Utica, N. Y., has published a bulletin entitled "Needless Ruin" which describes an installation of the Foamite foam generator and the Foamite generator system, as applied to the protection of boats against fire.

PACKING. — The National Asbestos Packing Manufacturing Company, Inc., New York, has issued a catalogue of various packings for use with steam, gas, air, water and ammonia. The application of National packing has proved satisfactory for marine and stationary boilers, engines and pumps.

RUBBER BEARINGS.—The B. F. Goodrich Rubber Company, Akron, Ohio, has issued a pamphlet describing the cutless rubber stern and strut bearings which are manufactured to take the place of the customary metal or lignum vitae propeller shaft bearings without change in size. They are lubricated entirely by water, and will not score the shaft.

Marine Societies

America

American Marine Association, 30 Church St., New York. President—Col. E. A. Simmons.

American Marine Standards Committee. Chairman, Colonel E. A. Simmons. Secretary, A. V. Bouillon, Division of Simplified Practice, Department of Commerce, Washington, D C.

American Society of Marine Designers. Secretary—B. G. Barnes, 202 Kendrick Ave., Quincy, Mass.

American Society of Marine Engineers. 605 Market St., San Francisco, Calif. Presiednt—Henry F. Gelhaus. Secretary—W. H. Thille.

American Society of Naval Engineers. Navy Department, Washington, D. C. Secretary Treasurer & Commander H. B. Hird, U. S. N., Bureau of Engineering, Navy Department, Washington, D. C.

American Steamship Owners' Association, 11 Broadway, New York. President—H. B. Walker.

Atlantic Coast Shipbuilders' Association. 1600 Walnut Street, Philadelphia, Pa. Secretary—C. S. King.

Council of American Shipbuilders, Inc., 50 Broadway, New York. President—Homer L. Ferguson. Secretary-Treasurer—Henry C. Hunter.

Jersey Marine Club, 4th and River Streets, Hoboken, N. J. Secretary—Fred L. Broad.

Lake Carriers' Association. President J. S. Ashley. Secretary—George A. Marr, Rockefeller Building Cleveland O.

National Association of Engine and Boat Manufacturers, 29 West 39th Street, New York City. Secretary—Ira Hand.

National Association of Masters, Mates and Pilots, National Secretary—M. D. Tenniswood, 308 Vine St., Camden, N. J.

National Marine Engineers' Beneficial Association. Headquarterse 311-315 Machinists Build-Ing, Washington, D. C. Prsident—Wm. F. Yates. Secretary—Albert L. Jones.

Neptune Association, 21 Pearl St., New York City. Secretary-Treasurer—Captain John F. Milliken.

New York and New Jersey Dry Dock Association. 111 Broadway, New York. President—Jonathan Moore.

Ocean Association of Marine Engineers. 15 Whitehall St., New York. Secretary—Bert L. Todd.

Port of New York Authority, 75 West Street, New York. Chairman—George S. Silzer. Secretary—Wilson J. Vance.

Society of Naval Architects and Marine Engineers, 29 West 39th Street, New York. Secretary and Treasurer—Daniel H. Cox.

The Maritime Association of the Port of New York, 78 Broad St., New York City President—John Dowd Secretary—John F. Manning.

The New York Tow Boat Exchange 11 Moore St., New York. Manager—Langdon W. Smith.

The Propeller Club of the Port of New York. President—Harry W. Parsons, 111 Broadway, New York. Secretary—W. Z. Gardner, 136 Liberty Street, New York.

United States Naval Institute. Naval Academy, Annapolis, Md. Secretary and Treasurer—Captain H. A. Baldridge, U. S. N.

United States Ship Operators' Association, 149 Broadway, New York. President—Winchester Noyes.

Canada

Grand Council N. A. of M. E. of Canada. Grand Secretary-Treasurer—W. A. MacDonald 62 Albert St, Halifax N. S:

Great Britain

Institute of Marine Engineers Incorporated, 85-88 The Minories, London E.1.

Institution of Engineers and Shipbuilders in Scotland, 39 Elmbank Crescent, Glasgow.

Institution of Naval Architects, 5 Adelphi Terrace, London, W. C.

North East Coast Institution of Engineers and Shipbuilders. Bolbec Hall, Westgate Road, Newcastle-on-Tyne.

France

Association Technique Maritime et Aëronautique. Secrétariat Genéral—7, rue de Madrid, Paris (8e).

Italy

Collegio Degli Ingegneri Naval e Meccanici In Italia.

Generated on 2024-09-12 14:16 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

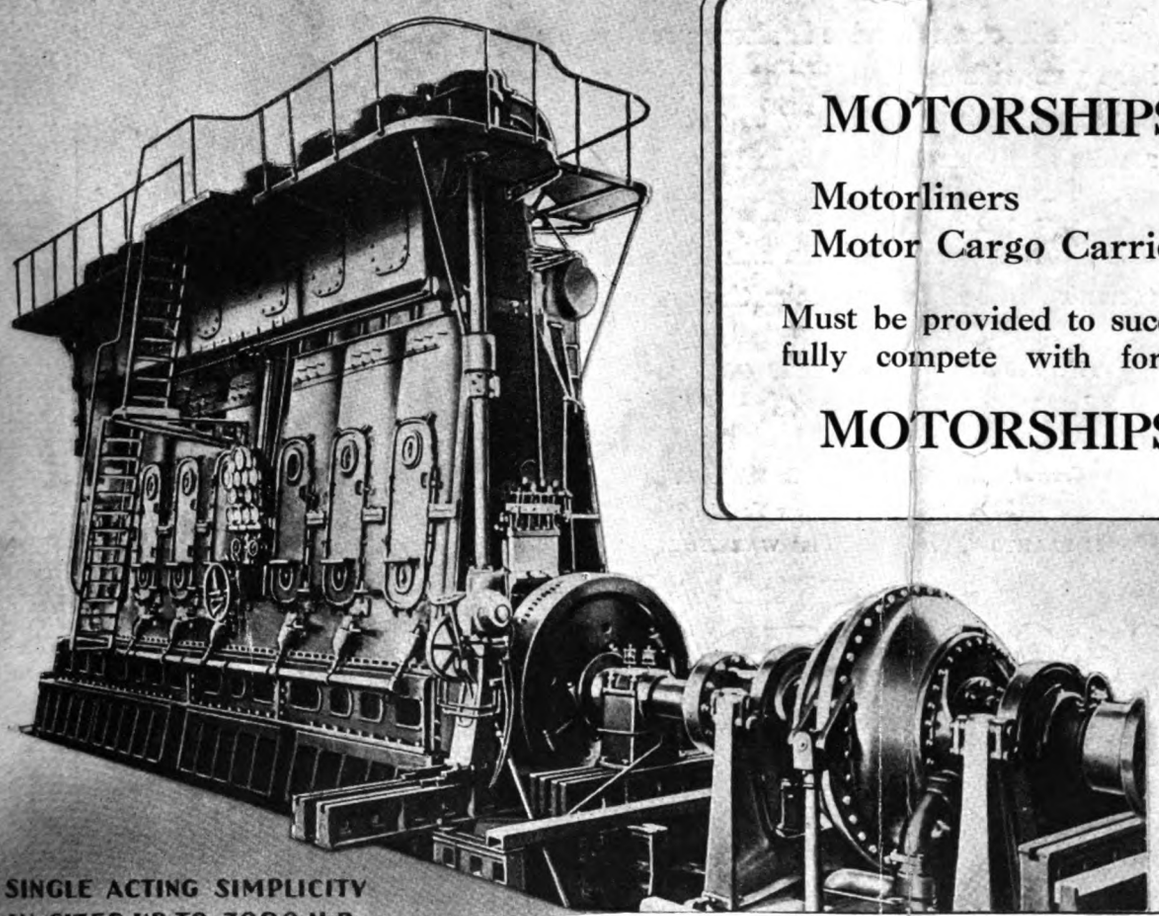
AUGUST, 1928

Marine Engineering and Shipping Age

BUSCH-SULZER

TWO-CYCLE

DIESEL MARINE ENGINES



SINGLE ACTING SIMPLICITY
IN SIZES UP TO 7000 H.P.

MOTORSHIPS

Motorliners
Motor Cargo Carriers

Must be provided to successfully compete with foreign

MOTORSHIPS

BUSCH-SULZER BROS.—DIESEL ENGINE CO.

ST. LOUIS, MO.

TWO RECTOR ST.
NEW YORK

RIALTO BLDG.
SAN FRANCISCO

Generated on 2024-09-12 14:14 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

stated that though in some cases the cost of arc welding has exceeded the cost of riveting, not only in structural work but in the manufacture of steel pipe, tanks, girders, etc., a recent discovery by the research laboratories of The Lincoln Electric Company of a new welding process known as the electronic tornado has been perfected to such a degree that present welding costs can be reduced 75 percent by the new process.

Business and Personal

The second issue of *The Auroco News* has been received from the **Automotive Royalties Corporation, Inc.,** New York City. This pamphlet is devoted to the publication of information concerning various new inventions and newly manufactured products in the automotive field.

The **Builders & Industrial Supply Company,** Toledo, Ohio, is handling the various products of the **Botfield Refactories** Company, Philadelphia, Pa., in the vicinity of Toledo, Ohio..

The marine department of the **J. L. Mott Iron Works** has moved its office, show room and warehouse to 96 Pine street, New York.

Due to a marked increase in business during the past year, the **Peabody Engineering Corporation,** 110 East 42nd street, New York, has increased its engineering personnel and has leased additional space at its New York office.

The **Williams Steamship Company, Inc.,** which operates a service from New York to Pacific coast ports, has removed its berth from Pier 1, Erie Basin to the foot of 30th street, Brooklyn, N. Y.

The Boston office of **Sanderson & Son,** agents for the **Royal Mail, Lamport & Holt** and **Pacific Steam Navigation Lines,** has been closed and the business will be handled by the Boston office of the **International Mercantile Marine Company.**

T. Ishitani, former manager of the Calcutta branch office of the **Nippon Yusen Kaisha,** has been appointed manager of the New York office of the line, succeeding **S. Sakamoto,** who is returning to Japan.

Trade Publications

WINCHES. — The Stimmel Winch & Machine Works, New York, has distributed a group of folders in which truck winches, derrick and boat winches are described as well as capstans for various purposes.

ELECTRICAL EQUIPMENT.—A group of bulletins covering turbines, generator motors, switches and controls have been distributed by the General Electric Company, Schenectady, N. Y.

WELDING EQUIPMENT.—A folder has been received from the Fusion Welding Corporation of Chicago in which the merits of the Fuzon welder are explained.

CASTINGS. — The Peerless Products Company of New York has issued a pamphlet describing their ability to manufacture small and ornamental castings.

STARTERS.—The Monitor Controller Company, Baltimore, Md., has issued price lists and part lists covering standard and junior size Monitor thermaload starters.

HEAT ENGINEERING. — The Foster Wheeler Corporation of New York has published the bulletin "Heat Engineering" in which the installation of jet condensers on the Great Lakes car ferry *Wabash* is described.

LUBRICATION.—The Texas Company, New York, has described the factors involved in lubricating the steam turbine in the March, 1928, issue of "Lubrication" a technical publication devoted to the selection and use of lubricants.

HARDWARE.—A catalogue of marine hardware and general ship chandlers goods has been received from DeGrauw, Aymar & Company, New York, in which numerous articles of nautical application are described with current prices.

COMPRESSORS. — The Ingersoll-Rand Company, New York, has published a new 44-page bulletin on ER and FR compressors and vacuum pumps. These are the small and intermediate size machines produced by the company.

ALLOY STEEL.—The International Nickel Company, New York, has published an article entitled "Alloy Steel for Boiler Construction" by Charles McKnight. This paper points out the fact that nickel steel offers many advantages in the modern trend toward higher operating temperatures and pressures in boilers.

S. S. MERCER.—A souvenir booklet descriptive of the first ocean voyage of any vessel under power produced by pulverized coal has been issued by the Kennedy-Van Suan Manufacturing & Engineering Corporation, New York.

ABRASIVE METAL.—Alumalun, Feralun and Bronzalun are described in a pamphlet entitled "For Safety Sea Legs issued by the American Abrasive Metals Company, New York. These products are used for antislip treads and floor plates where the danger of slippage is present.

FOAMITE—The American La France & Foamite Corporation, Utica, N. Y., has published a bulletin entitled "Needless Ruin" which describes an installation of the Foamite foam generator and the Foamite generator system, as applied to the protection of boats against fire.

PACKING. — The National Asbestos Packing Manufacturing Company, Inc., New York, has issued a catalogue of various packings for use with steam, gas, air, water and ammonia. The application of National packing has proved satisfactory for marine and stationary boilers, engines and pumps.

RUBBER BEARINGS.—The B. F. Goodrich Rubber Company, Akron, Ohio, has issued a pamphlet describing the cutless rubber stern and strut bearings which are manufactured to take the place of the customary metal or lignum vitae propeller shaft bearings without change in size. They are lubricated entirely by water, and will not score the shaft.

Marine Societies

America

American Marine Association, 30 Church St., New York. President—Col. E. A. Simmons.

American Marine Standards Committee. Chairman, Colonel E. A. Simmons. Secretary, A. V. Bouillon, Division of Simplified Practice, Department of Commerce, Washington, D C.

American Society of Marine Designers. Secretary—B. G. Barnes, 202 Kendrick Ave., Quincy, Mass.

American Society of Marine Engineers. 605 Market St., San Francisco, Calif. Presiednt—Henry F. Gelhaus. Secretary—W. H. Thille.

American Society of Naval Engineers. Navy Department, Washington, D. C. Secretary Treasurer & Commander H. B. Hird, U. S. N., Bureau of Engineering, Navy Department, Washington, D. C.

American Steamship Owners' Association, 11 Broadway, New York. President—H. B. Walker.

Atlantic Coast Shipbuilders' Association. 1600 Walnut Street, Philadelphia, Pa. Secretary—C. S. King.

Council of American Shipbuilders, Inc., 50 Broadway, New York. President—Homer L. Ferguson. Secretary-Treasurer—Henry C. Hunter.

Jersey Marine Club, 4th and River Streets, Hoboken, N. J. Secretary—Fred L. Broad.

Lake Carriers' Association. President J. S. Ashley. Secretary—George A. Marr, Rockefeller Building Cleveland O.

National Association of Engine and Boat Manufacturers, 29 West 39th Street, New York City. Secretary—Ira Hand.

National Association of Masters, Mates and Pilots, National Secretary—M. D. Tennis-wood, 308 Vine St., Camden, N. J.

National Marine Engineers' Beneficial Association. Headquarterse 311-315 Machinists Build-Ing, Washington, D. C. Prsident—Wm. F. Yates. Secretary—Albert L. Jones.

Neptune Association, 21 Pearl St., New York City. Secretary-Treasurer—Captain John F. Milliken.

New York and New Jersey Dry Dock Association. 111 Broadway, New York. President—Jonathan Moore.

Ocean Association of Marine Engineers. 15 Whitehall St., New York. Secretary—Bert L. Todd.

Port of New York Authority, 75 West Street, New York. Chairman—George S. Silzer. Secretary—Wilson J. Vance.

Society of Naval Architects and Marine Engineers, 29 West 39th Street, New York. Secretary and Treasurer—Daniel H. Cox.

The Maritime Association of the Port of New York, 78 Broad St., New York City President—John Dowd Secretary—John F. Manning.

The New York Tow Boat Exchange 11 Moore St., New York. Manager—Langdon W. Smith.

The Propeller Club of the Port of New York. President—Harry W. Parsons, 111 Broadway, New York. Secretary—W. Z. Gardner, 136 Liberty Street. New York.

United States Naval Institute. Naval Academy, Annapolis, Md. Secretary and Treasurer—Captain H. A. Baldridge, U. S. N.

United States Ship Operators' Association, 149 Broadway, New York. President—Winchester Noyes.

Canada

Grand Council N. A. of M. E. of Canada. Grand Secretary-Treasurer—W. A. MacDonald 62 Albert St, Halifax N. S:

Great Britain

Institute of Marine Engineers Incorporated, 85-88 The Minories, London E.1.

Institution of Engineers and Shipbuilders in Scotland, 39 Elmbank Crescent, Glasgow.

Institution of Naval Architects, 5 Adelphi Terrace, London, W. C.

North East Coast Institution of Engineers and Shipbuilders. Bolbec Hall, Westgate Road, Newcastle-on-Tyne.

France

Association Technique Maritime et Aëronautique. Secrétariat Genéral—7, rue de Madrid, Paris (8e).

Italy

Collegio Degli Ingegneri Naval e Meccanici In Italia.

Generated on 2024-09-12 14:15 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

AUGUST, 1928

AUG 1 1928

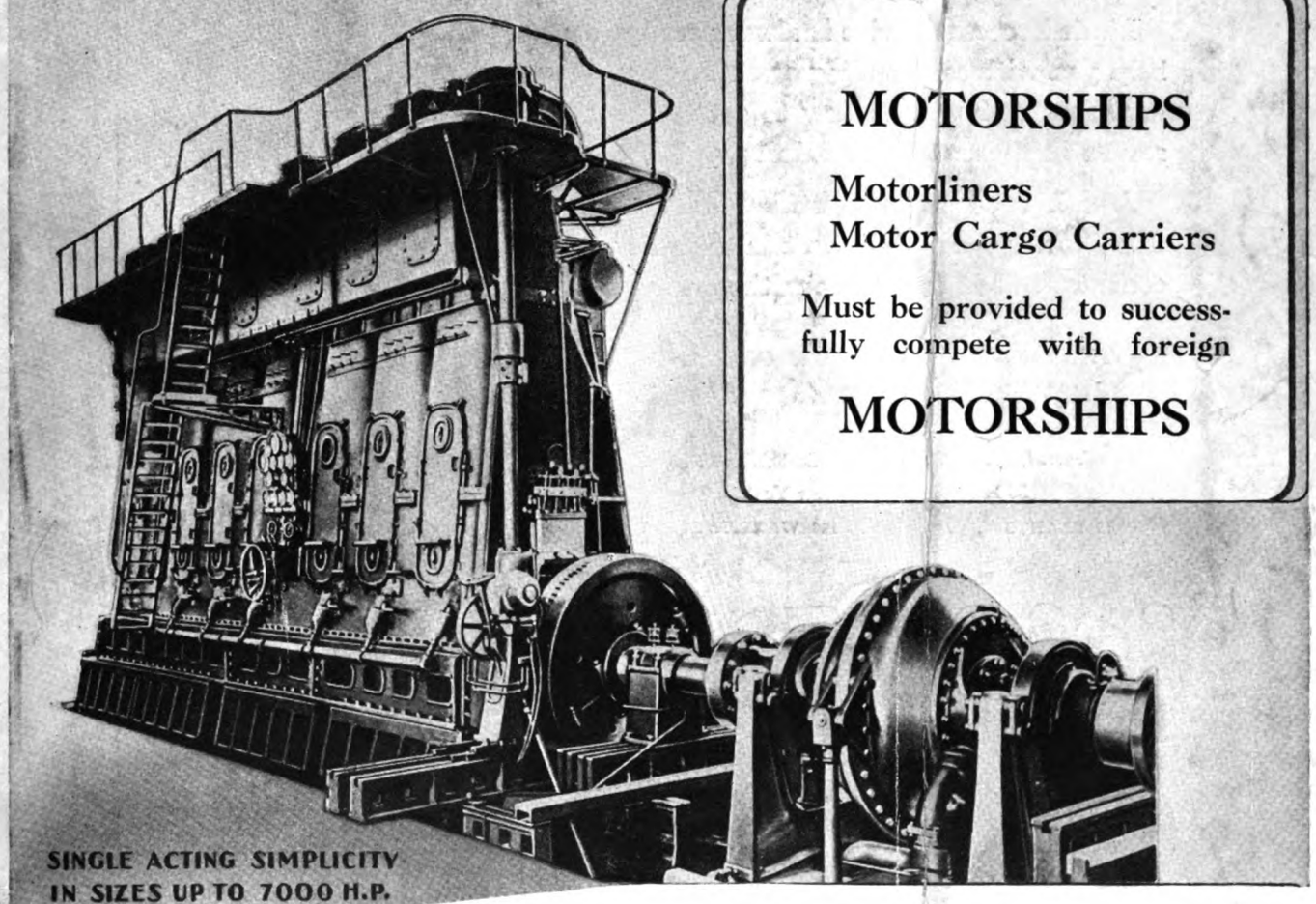
Marine Engineering

and Shipping Age

BUSCH-SULZER

TWO-CYCLE

DIESEL MARINE ENGINES



SINGLE ACTING SIMPLICITY
IN SIZES UP TO 7000 H.P.

MOTORSHIPS

Motorliners
Motor Cargo Carriers

Must be provided to successfully compete with foreign

MOTORSHIPS

BUSCH-SULZER BROS.—DIESEL ENGINE CO.

ST. LOUIS, MO.

TWO RECTOR ST.
NEW YORK

RIALTO BLDG.
SAN FRANCISCO

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

For Linde customers *only*

AS a user of Linde Oxygen you get a product of uniform high quality and prompt delivery service. *But are you making full use of Linde Process Service?*

Linde Process Service is always ready to help you with any welding or cutting problem. It will show you how to get the best results in the most economical way.

As a Linde customer you are entitled to this Process Service. It isn't in the written contract but it is yours for the asking.

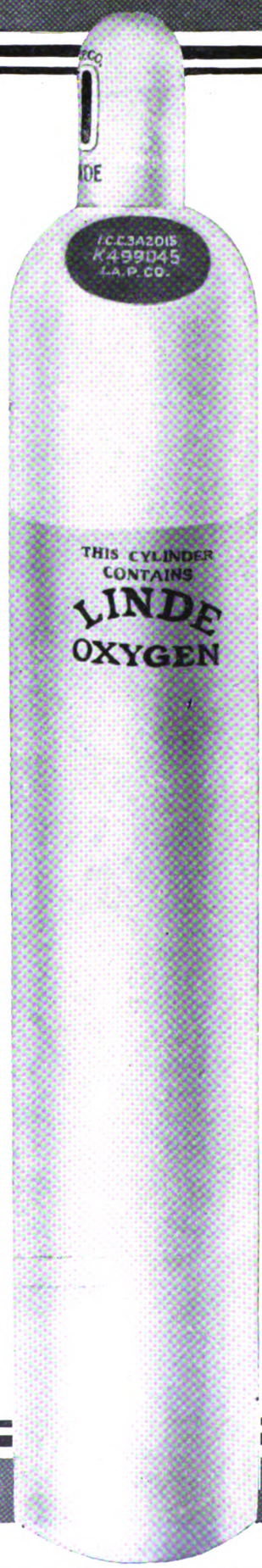
THE LINDE AIR PRODUCTS COMPANY
Unit of Union Carbide and Carbon Corporation

UCC

General Offices: Carbide and Carbon Building
30 East 42d Street, New York

49 PLANTS . . . . . 103 WAREHOUSES

LINDE OXYGEN



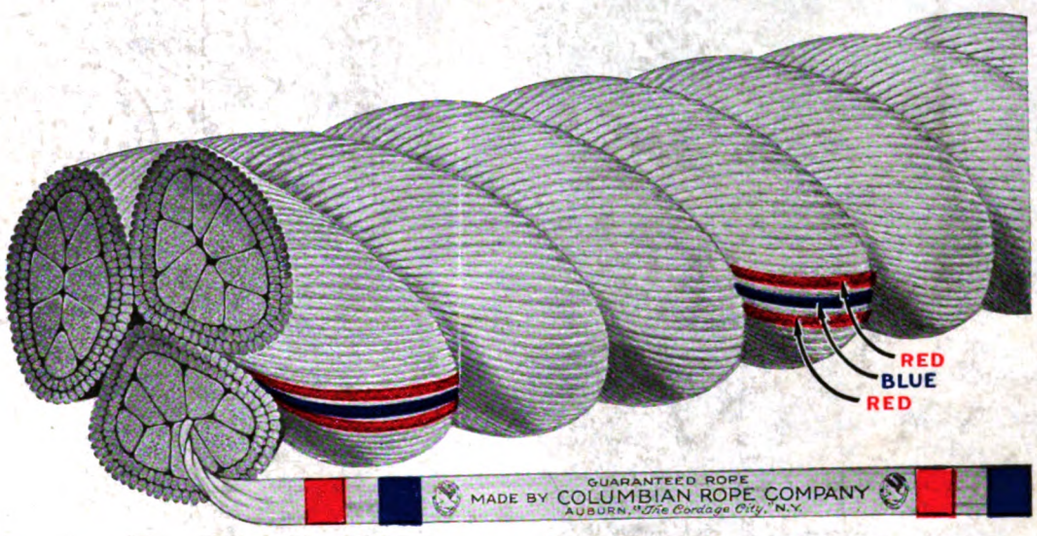
Vol. XXXIII No. 8
Published monthly by Simmons-Boardman Publishing Company, 34 North Crystal Street, East Stroudsburg, Pa. Entered as second class matter, March 15, 1928, at the post office at East Stroudsburg, Pa., under the act of March 3, 1879.

Generated on 2024-09-12 14:18 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

SEP 8 1928

SEPTEMBER, 1928

Marine Engineering and Shipping Age



Let me tackle your HARD Jobs

I crave action! My heart, composed of large, loosely twisted yarns is a brute to withstand every hardship of towing. Sharp strains are absorbed rather than resisted. Look at my double thick jacket! It not only protects my heart but also minimizes external abrasive wear.

That I completely qualify to handle your hardest jobs is shown by some of my characteristics. I am fully guaranteed by the Columbian *Tape-Marker*. I am easily spliced. I have been thoroughly waterproofed and have flexibility without distortion.

In every way I am superior to the old style towing line and at no extra cost, I will give you longer and more satisfactory towing service than you have ever had before.

I am

Columbian Tow-Ro

Columbian Rope Company
372-90 Genesee Street
Auburn, N. Y. *"The Cordage City"*

Branches— **New York** **Chicago** **Boston** **New Orleans**

Generated on 2024-09-12 14:49 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

new *or* worn . .
TRU-LAY *is easy on the hands!*

Workmen who know TRU-LAY Rope prefer this preformed brand because it is easy and safe to handle.

They like to work with TRU-LAY—it puts a stop to injuries from broken wires—inevitable with ordinary ropes. Its preformed construction eliminates torsional stresses. Every wire is laid in place, not twisted, so there is no kinking, unstranding or "bird-caging."

If you require a rope that is safe to work with and that will enable you to do better work at less cost, it will pay you to investigate TRU-LAY. Your name and address bring a sample and informative literature.

AMERICAN CABLE COMPANY, *Inc.*

Grand Central Terminal Bldg., New York, N. Y.

District Offices: Chicago Detroit Philadelphia Pittsburgh San Francisco Tulsa

An Associate Company of the American Chain Company, *Inc.*

Dominion Wire Rope Company, *Limited*, Montreal
Sole Canadian Licensed Manufacturers

PREFORMED WIRE ROPE

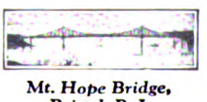
TRADE TRU-LAY MARK

REG. U. S. PAT. OFF.

AMERICAN CABLE IS USED ON THE WORLD'S GREATEST BRIDGES

Detroit International Bridge

Philadelphia-Camden Bridge
The World's Greatest Suspension Bridge



Mt. Hope Bridge, Bristol, R. I.

Vol. XXXIII No. 9

Published monthly by Simmons-Boardman Publishing Company, 34 North Crystal Street, East Stroudsburg, Pa. Entered as second class matter, March 10, 1928, at the post office at East Stroudsburg, Pa., under the act of March 3, 1879.

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

OCTOBER, 1928

OCT 2 1928

Marine Engineering and Shipping Age

Golden Gate Repeats with Ingersoll-Rand Marine Engines

FOLLOWING the successful performance of the three Diesel-electric ferries "Golden Bear," "Golden Shore," and "Golden Poppy," the Golden Gate Ferry Company has placed a REPEAT ORDER for a fourth boat of identical specifications.

Like its three sister ships, the new boat will use Ingersoll-Rand Marine Oil Engines of 400 b. hp., each being direct-connected to a generator and an exciter.

INGERSOLL-RAND COMPANY
11 BROADWAY NEW YORK CITY

Offices in principal cities the world over.

58—MOE.

Ingersoll-Rand

Generated on 2024-09-12 14:20 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

..Saving the Generator's Excess Power

The Exide-Ironclad Battery stores up surplus current . . . uses it to smooth out fluctuating loads in winch operation

Exide-Ironclad Batteries increase the efficiency of oil auxiliary engines on motorships. They smooth out fluctuating loads in winch operation.

TO utilize spare power—smooth out fluctuating loads in winch operation—that is one way an Exide-Ironclad Battery can increase the efficiency of your auxiliary engines.

Floated across the generator, an Exide-Ironclad stores up excess current during the slack intervals—discharges it at a tremendously high rate during the peaks.

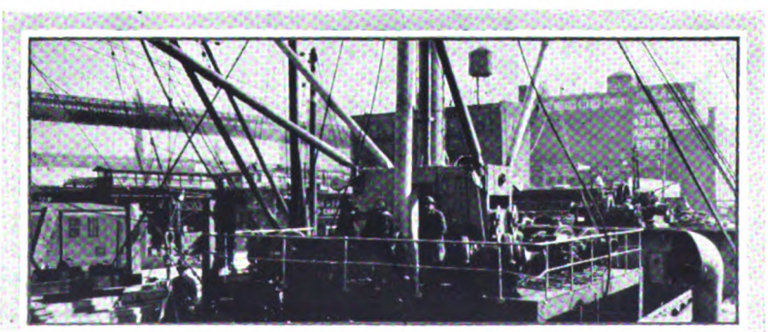
Thus the auxiliary oil engine operates under a steady load. It operates more efficiently, more economically, and develops more power.

Steering, lighting, cooking, and pump operation are some of the many other jobs an Exide-Ironclad can handle efficiently and economically.

In port, an Exide-Ironclad will take care of all your power needs—furnish current for lighting, heating or pump operation. Thus it can enable you to do away with night engine-room watches entirely.

Every motorship owner should have the complete facts about Exide-Ironclad Batteries and the many economies they make possible on motorships.

There's an Exide representative in practically every important coast and inland port. Get in touch with the one nearest you. He will be glad to give you full information about this dependable battery.



Exide
IRONCLAD
BATTERIES

THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia

Exide Batteries of Canada, Limited, Toronto

Vol. XXXIII No. 10

Published monthly by Simmons-Boardman Publishing Company, 34 North Crystal Street, East Stroudsburg, Pa. Entered as second class matter, March 10, 1928, at the post office at East Stroudsburg, Pa., under the act of March 3, 1879.

Generated on 2024-09-12 14:18 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

NOVEMBER, 1928

NOV 3 1928

Marine Engineering

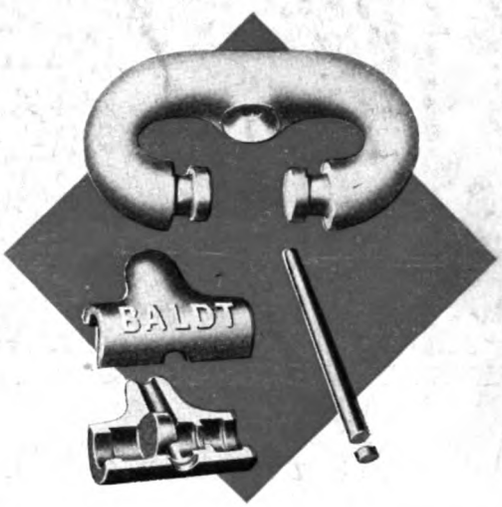
and Shipping Age

The Old Way

Announcing

A New Baldt Product

A Detachable Link for Stud Link Chain



AFTER years of experimenting we are offering to the trade a detachable link with a strength more than double that required for ordinary chain.

It is made of steel, drop forged, and will pull 125,000 lbs. per square inch.

It is the same length and pitch as the ordinary common links in chain and may be used as a repair link.

Difficulty has always been experienced in end links and shackles passing over the wildcat. You can now burn off your end links and join the shots together with this link and you will have all links alike and the chain will ride freely over the wildcat.

After the link is put together and taper pin is driven in place a lead slug is driven into the recess securing the pin. Pins are made of stainless metal and can easily be removed.

The New Way

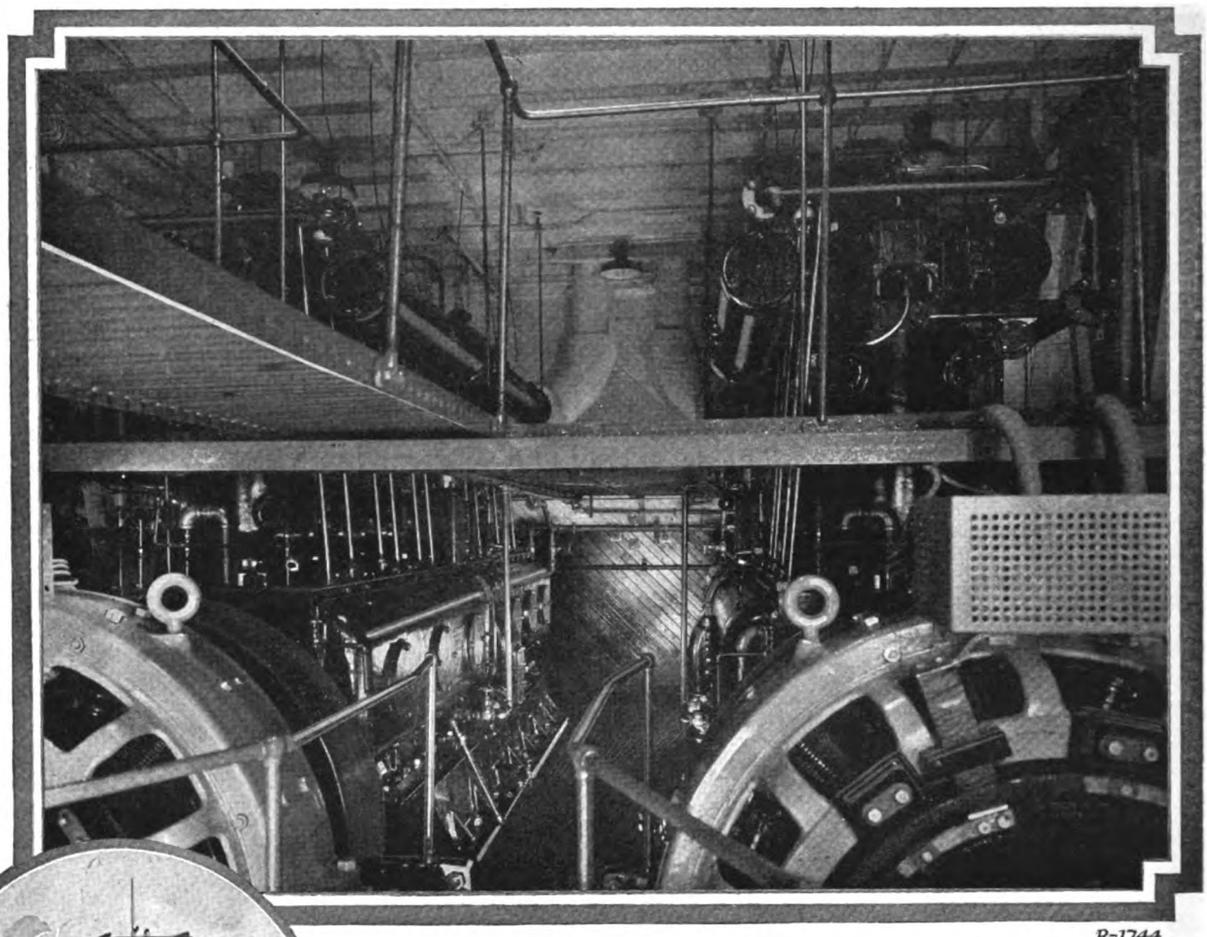
Baldt

ANCHOR, CHAIN & FORGE CORP.

CHESTER, PA.

Manufacturers of the original stockless anchor

Generated on 2024-09-12 14:16 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



R-1744

Engine room of Golden Poppy, showing two of the three Ingersoll-Rand 400-b.hp. engines direct-connected to generators and exciters

A REPEAT ORDER

SUCCESSFUL performance of the three Diesel-electric ferries owned by the Golden Gate Ferry Company has won a repeat order for a fourth boat of identical specifications.

Like her three sister ships, the new boat will use three Ingersoll-Rand 400-b.hp. solid-injection Diesel engines direct-connected to a generator and exciter.

The question today before shipbuilders and operators is not, "Shall we use Diesels?" but, "What Diesel shall we use?" **Performance decided this question for the Golden Gate Ferry Company.**

INGERSOLL-RAND COMPANY
11 Broadway :: :: New York City
Offices in principal cities the world over
For Canada Refer—Canadian Ingersoll-Rand Co., Limited
10 Phillips Square, Montreal, Quebec

70 M.O.E.

Ingersoll-Rand

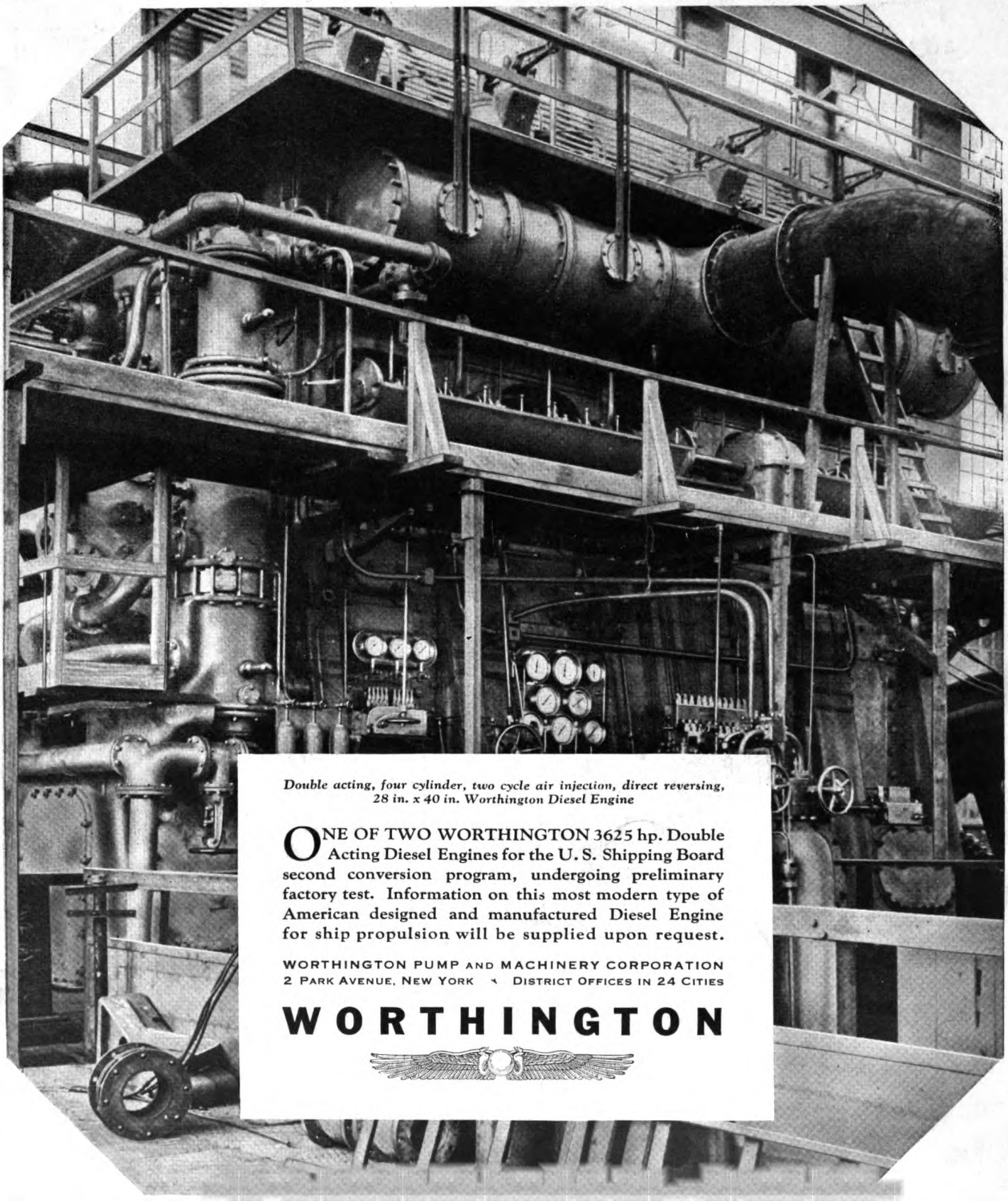
Vol. XXXIII No. 11
Published monthly by Simmons-Boardman Publishing Company, 34 North Crystal Street, East Stroudsburg, Pa. Entered as second class matter, March 10 1928, at the post office at East Stroudsburg, Pa., under the act of March 3, 1879.

Generated on 2024-09-12 14:17 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

DECEMBER, 1928

DEC 6 1928

Marine Engineering and Shipping Age



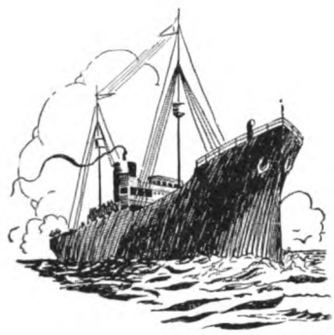
Double acting, four cylinder, two cycle air injection, direct reversing, 28 in. x 40 in. Worthington Diesel Engine

ONE OF TWO WORTHINGTON 3625 hp. Double Acting Diesel Engines for the U. S. Shipping Board second conversion program, undergoing preliminary factory test. Information on this most modern type of American designed and manufactured Diesel Engine for ship propulsion will be supplied upon request.

WORTHINGTON PUMP AND MACHINERY CORPORATION
2 PARK AVENUE, NEW YORK · DISTRICT OFFICES IN 24 CITIES

WORTHINGTON

Generated on 2024-09-12 14:46 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



SHIP REPAIRS and Marine Installations

The Bethlehem organization includes some of the oldest shipbuilding and ship repair plants in the United States. Bethlehem is thoroughly equipped to handle any problem in ship construction, engineering, and hull repairs, and in the conversion of vessels from steam to Diesel drive.

Atlantic Coast Facilities

BOSTON HARBOR
BOSTON PLANT
SIMPSON WORKS
3 Graving Docks, 465, 256, and 164 feet
1—10,000 ton Floating Dry Dock
ATLANTIC WORKS
3 Marine Railways 2,000, 1,000 and 500 tons
2 Floating Dry Docks, 6,500 and 360 tons
BALTIMORE HARBOR
BALTIMORE PLANT
BALTIMORE DRY DOCKS WORKS
2 Graving Docks 614 and 469 feet
2 Marine Railways 800 and 500 tons
SPARROWS POINT WORKS
2 Floating Dry Docks, 20,000 and 6,000 tons

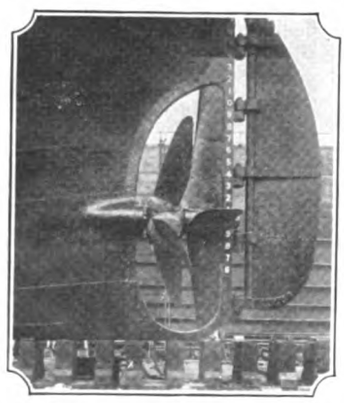
Pacific Coast Facilities

(UNION PLANT)
SAN FRANCISCO HARBOR
POTRERO WORKS
3 Floating Dry Docks, 6,500, 2,500 and 2,000 tons
HUNTER'S POINT WORKS
2 Graving Docks, 1,020 and 750 ft.
ALAMEDA WORKS
2 Marine Railways, 4,000 and 2,000 tons
LOS ANGELES HARBOR
SAN PEDRO WORKS
1 Floating Dry Dock 15,000 tons

Star Contra-Propellers and Star Contra-Rudders

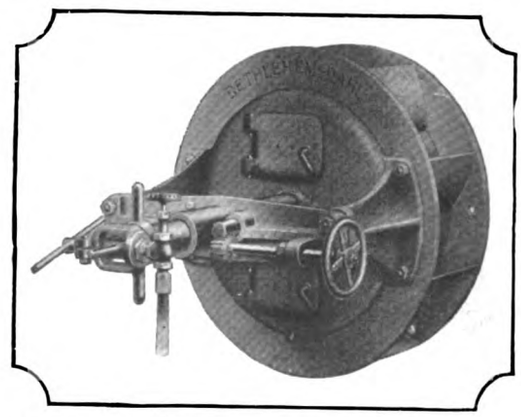
Star Contra-Propellers and Star Contra-Rudders will definitely increase speed and reduce fuel consumption.

Star Contra-Propellers and Star Contra-Rudders are manufactured exclusively by Bethlehem Shipbuilding Corporation, Ltd., under license from Th. Goldschmidt Corporation, 68 Beaver St., New York City.



Oil Burning Systems

Long service on over 500 ships equipped with Bethlehem (Dahl) Mechanical Oil Burning Systems has demonstrated their exceptionally low fuel consumption. A mechanical type of burner is used, which is applicable to any style of boiler, and which will burn from the heaviest to the lightest grade of fuel oil.



BETHLEHEM SHIPBUILDING CORPORATION, LTD., BETHLEHEM, PA.
General Sales Offices:—
East Coast: 25 Broadway, New York City West Coast: Matson Bldg., San Francisco
District Offices in Boston, Philadelphia, Baltimore

BETHLEHEM

Vol. XXXIII No. 12
Published monthly by Simmons-Boardman Publishing Company, 34 North Crystal Street, East Stroudsburg, Pa. Entered as second class matter, March 10 1928, at the post office at East Stroudsburg, Pa., under the act of March 3, 1879.

Generated on 2024-09-12 14:16 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

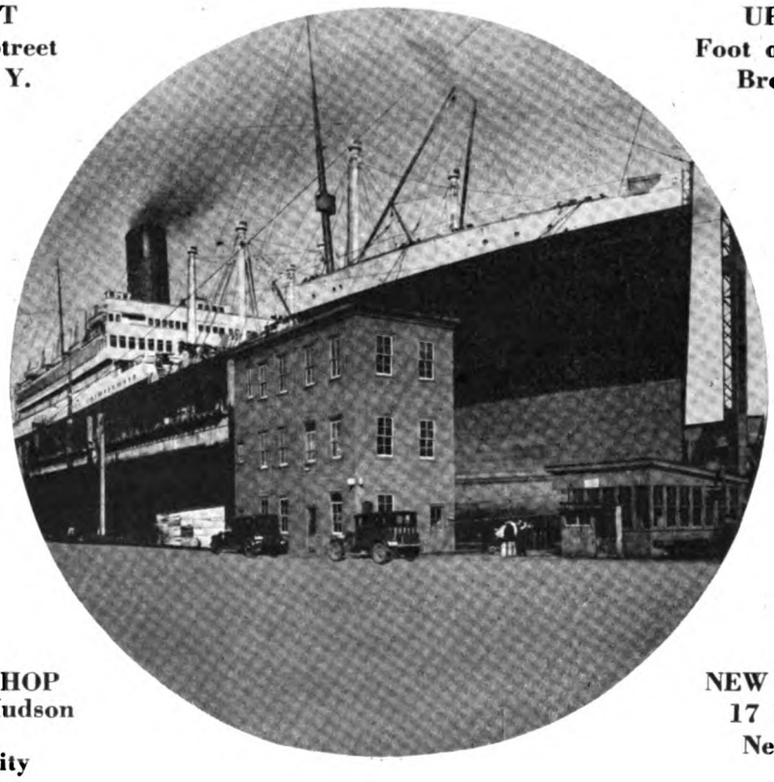
MORSE
DRY DOCK & REPAIR CO.

PORT OF NEW YORK

Dry Docking—Ship Repairs
Diesel Conversions
Fuel Oil Installations
Turbine Balancing
Special Machinery Installations

MAIN PLANT
Foot of 56th Street
Brooklyn, N. Y.

UPPER YARD
Foot of Prospect Ave.
Brooklyn, N. Y.



NEW YORK SHOP
23d Street & Hudson River
New York City

NEW YORK OFFICE
17 Battery Place
New York City

All telephones—Sunset 5100

Cable Address—Pyrosison

Generated on 2024-09-12 14:35 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Marine Engineering

and Shipping Age

Vol. XXXIII **DECEMBER, 1928** **No. 12**

Page

Editorial Comment 631
The naval architects' meeting. Stability. New operators' agreement. Lloyd's annual report. Corrosion.
Marine Engineering and Shipping Age, December, 1928.

Passenger Steamship Virginia 635
Sea trials of new Panama-Pacific liner show higher fuel economies than the *California*. 3 illustrations.
Marine Engineering and Shipping Age, December, 1928.

Passenger Liner Highland Monarch 637
By our London Correspondent.
One of five new Nelson Line motorships for South American service. New type of refrigerating machinery installed. 7 illustrations.
Marine Engineering and Shipping Age, December, 1928.

Electricity on Board Ship 640
By DAVID GAEHR.
Notes for the study of electricity and its application in connection with the operation of a ship.
Marine Engineering and Shipping Age, December, 1928.

Stoker Tests 642
By T. B. STILLMAN.
Forced-blast, chain-grate stoker tests carried out with Babcock & Wilcox marine watertube boiler. 4 illustrations.
Marine Engineering and Shipping Age, December, 1928.

Pulverized Fuel Developments 646
By C. J. JEFFERSON, COMMANDER J. S. EVANS and COMMANDER J. BROSHEK.
Service results of pulverized coal installation on S. S. *Mercer*. Other installations. Experimental work at Philadelphia Navy Yard. 8 illustrations.
Marine Engineering and Shipping Age, December, 1928.

Welding Applied to Shipbuilding 651
By JAMES W. OWENS.
First instalment of serial article on welding in the shipyards. Outline of welding processes adaptable to ship work. Weight and cost savings analyzed. 3 illustrations.
Marine Engineering and Shipping Age, December, 1928.

Passenger Liner Kungsholm 655
Brief description of new 19,000-ton motor passenger liner built for Swedish-American Line. 1 illustration.
Marine Engineering and Shipping Age, December, 1928.

Page

Motorship Records, Shipping Board 656
By CAPTAIN R. D. GATEWOOD.
Analysis of operating and fuel performance data of twelve Shipping Board vessels converted to Diesel drive. 3 illustrations
Marine Engineering and Shipping Age, December, 1928.

Windlass Tests 659
By COMMANDER Q. B. NEWMAN, U. S. C. G.
Results of tests of electrically-operated anchor windlass on U. S. Coast Guard Cutter. 3 illustrations.
Marine Engineering and Shipping Age, December, 1928.

Naval Architects' Meeting 661
Report of thirty-sixth general meeting of Society of Naval Architects and Marine Engineers held in New York city November 15 and 16. Scientific application of welding to ship construction. Recent developments in shipbuilding on the Great Lakes. Design of airplane carriers. Design of large flying boat. The inclining experiment. Propeller backing power in tugboats. Performance of Shipping Board converted motor vessels. Recent pulverized fuel developments. Burning of hydrocarbons under marine boilers. Forced blast, chain-grate stoker tests of marine watertube boiler. Turbo-electric drive as applied on Great Lakes cargo ships. The central power station goes to sea. Description and trials of the *California*.
Marine Engineering and Shipping Age, December, 1928.

Electric Drive on the Great Lakes 679
By C. R. FISHER and A. KENNEDY, JR.
Details of turbo-electric propelling machinery and trial and service tests on self-unloading freighter.
Marine Engineering and Shipping Age, December, 1928.

Questions and Answers for Operating Engineers 683
Practical information on the operation and maintenance of boilers, engines and auxiliaries.
Marine Engineering and Shipping Age, December, 1928.

Questions and Answers 685

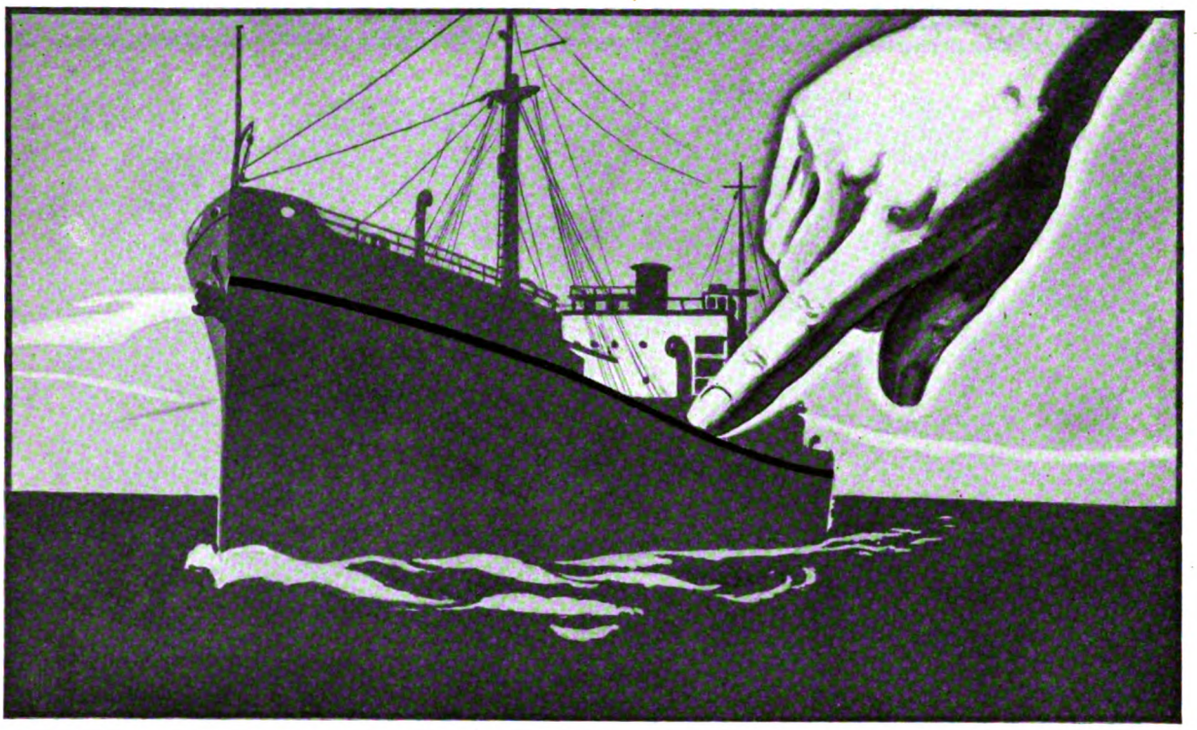
Personal 686

Ship Construction and Repair News 687

Published monthly by the Simmons-Boardman Publishing Company, 34 North Crystal Street, East Stroudsburg, Pa., with executive offices at 30 Church Street, New York.

EDWARD A. SIMMONS, President HENRY LEE, Vice-President and Treasurer C. R. MILLS, Vice-President
L. B. SHERMAN, Vice-President SAMUEL O. DUNN, Vice-President ROY V. WRIGHT, Secretary
F. H. THOMPSON, Vice-President GEORGE SLATE, Business Manager
CHICAGO: 105 W. Adams St. CLEVELAND: 6007 Euclid Avenue
WASHINGTON: 17th and H Sts., N. W. SAN FRANCISCO: 215 Market St.
Subscription price: United States, Canada and Mexico, $3.00; foreign countries, $4.00 a year.
Single Copies, 35 cents.

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



A Lookout *Below the Danger Line* for Schedule Regularity

A lookout whose vision reaches from bow to stern into every cargo hold and between deck space . . . an automatic lookout always on watch for cargo fires that might interrupt the ship's schedule. That is the Lux-Rich System.

But more than just a fire detector, the Lux-Rich System gives fire control. By controlling cargo fires—detecting and extinguishing them—it prevents schedule breakdowns and the other bad results of fire.

With fire control, harmful fire publicity is impossible, passengers' goodwill is protected and insurance rates will not be forced up by fire disasters.

This kind of fire control results only from the combination of fire detection with fire extinguishing—a feature of the Lux-Rich System. Without means for detection, fire hidden in the cargo would burn for hours, even days, before it was discovered. And unless fire is attacked while it is still small disasters are hard to prevent.

Another Lux-Rich feature—required for fire control—is the means by which the system detects fire. The system draws air samples from each cargo hold continuously and analyzes them for smoke. The important thing however, is that by analyzing each sample separately, it prevents dilution of the smoke by the air from the other holds and insures a prompt fire warning.

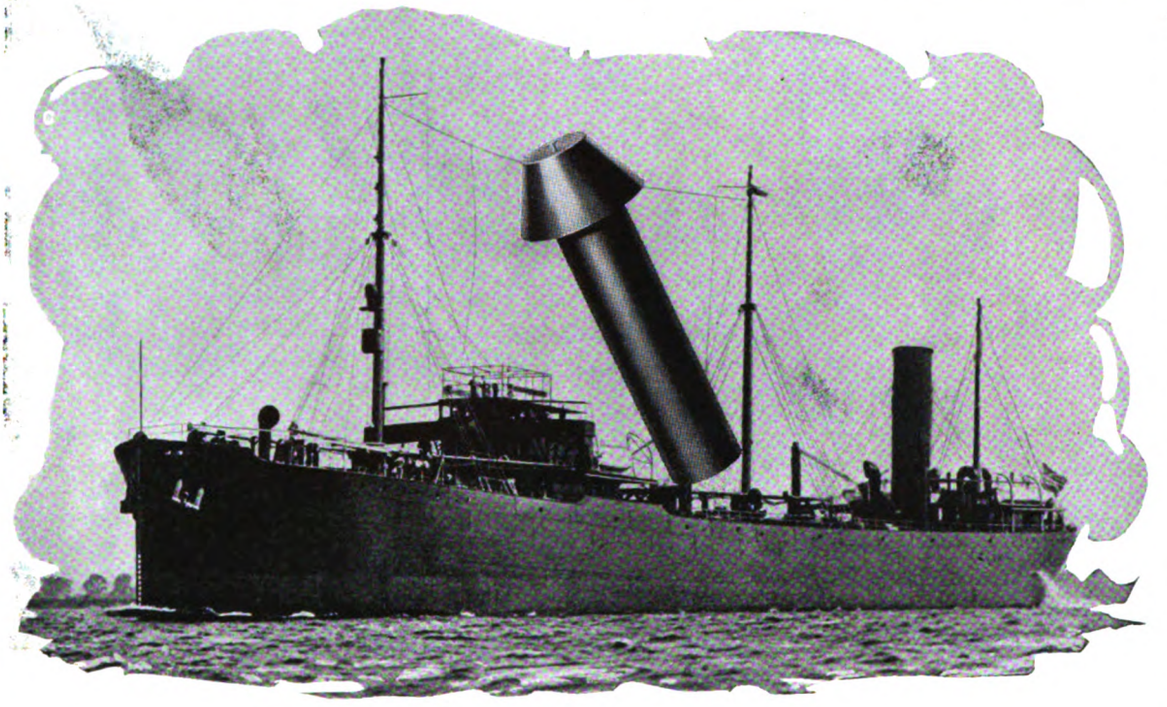
Complete information about the Lux-Rich system is available in a booklet entitled, "Incidents Instead of Disasters." It will tell you how the system can be applied on your ships.

Walter Kidde & Company, Inc.
140 Cedar Street
New York

The RICH System · THE DERBY SYSTEM

FIRE PROTECTION *for* LUX EVERY TYPE *of* SHIP

Generated on 2024-09-12 14:42 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



Give Under-Water Riveting The Protection of Toncan Iron

IN 48 vessels suffering from bottom rivet corrosion over 1,500,000 rivets were renewed, or 30,000 per vessel.

Here is a serious maintenance problem. Ordinary materials have failed to withstand the attack of corroding elements.

To remedy such conditions comes Toncan Iron, famous in scores of applications for its corrosion-resistance.

Toncan Iron rivets made by the Champion Rivet Company have the natural corrosion-resistance of refined iron fortified by the addition of copper and molybdenum. They will outlast ordinary rivets and should be used wherever corrosion may be troublesome.

REG. U.S. PAT. OFF.
TONCAN
COPPER
Mo-lyb-den-um
IRON

Toncan Iron Rivets are ideal for hull work as their tensile runs between 42,000 lbs. and 45,000 lbs. They are not critical to elevated temperatures and are therefore easy to drive.

CENTRAL ALLOY STEEL CORPORATION, *Massillon*, OHIO
World's Largest and Most Highly Specialized Alloy Steel Producers
Makers of Agathon Alloy Steels

Cleveland Detroit Chicago New York St. Louis
Syracuse Philadelphia Los Angeles Seattle
Cincinnati San Francisco

Export Office: 1519 Pershing Sq. Bldg., New York, N. Y.

TONCAN COPPER MO-LYB-DEN-UM IRON

Generated on 2024-09-12 14:20 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

OVER SIXTY-SIX YEARS IN SERVICE

IT has always been a part of Moran handling, docking and towing Service to give ship owners and operators more than the agreement calls for.

Financial responsibility, unexcelled marine equipment, a large and experienced operating personnel, a constant owner-executive supervision, and a 66 year reputation in New York Harbor for ability, honesty and fair dealing are not written into the contract.

These factors, and others, constitute the "plus" that differentiates Moran Service from the ordinary kind.

MORAN TOWING AND TRANSPORTATION COMPANY, INC

17 Battery Place, New York, N. Y.

Over 65 years of uninterrupted service in New York Harbor through three generations of the same ownership.

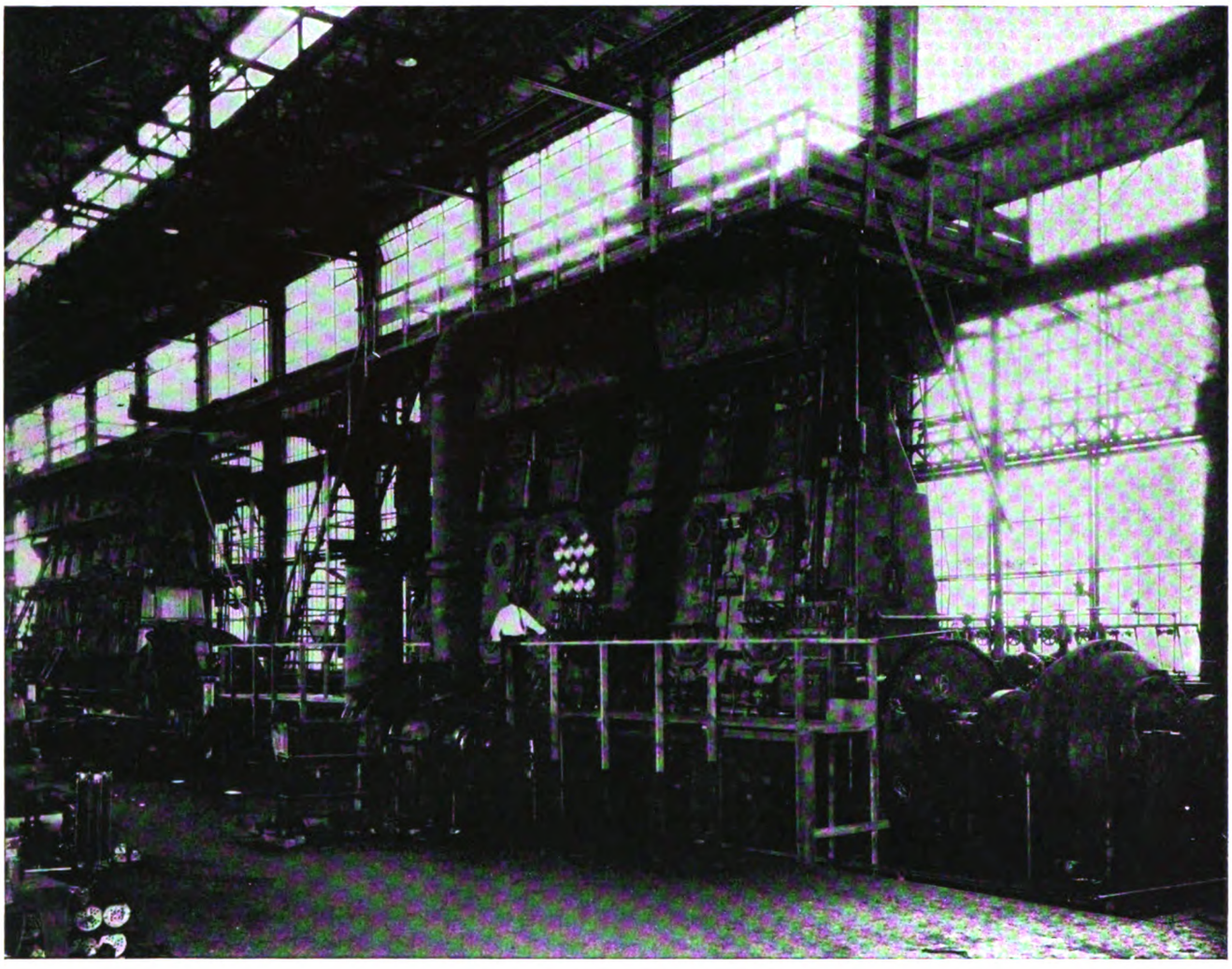
MORAN Service

M SERVICE

Generated on 2024-09-12 14:18 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from UNIVERSITY OF MICHIGAN



14,000 B.H.P. Diesels on Test Bed Including 2-4000 B.H.P. Shown Above

FUEL **main engine *.40* Equivalent Total Ship Fuel *.43 per S.H.P.***

LLOYD'S **Reports (Sept. 30, 1928) World Marine Engines Under Construction:**

249 Steam Reciprocating Engines	414,001	I.H.P.
33 " Turbines (excluding Germany)	345,500	S.H.P.
364 Diesels	1,281,178	I.H.P.

New American ships must compete with these foreign motorships for the next 25 years—buy fuel in the same ports on long trade routes—accept the same rates—

The Preponderance of Foreign Diesels Over Steam Demands Your Consideration

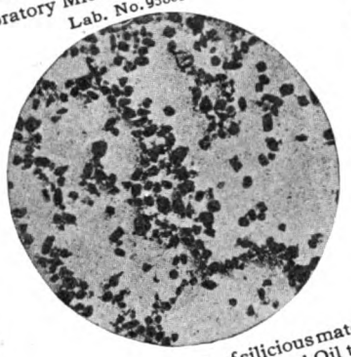
BUSCH-SULZER

BUSCH-SULZER BROS. — DIESEL ENGINE CO., ST. LOUIS, MO.

Generated on 2024-09-12 14:18 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

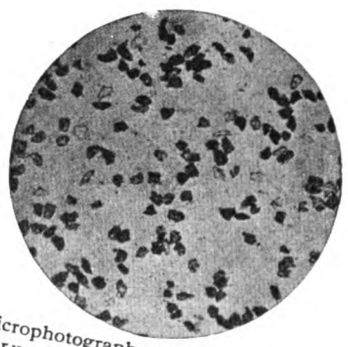
THE MICROSCOPE TELLS A CONVINCING SHARPLES STORY

CURTIS & TOMPKINS
Laboratory Microphotographic Slide
Lab. No. 95809



Microphotograph of silicious material found in sludge from Diesel Oil taken from Sharples Separator by our representative at Centrifuge Station of Southern Pacific Co., Oakland Mole, 5-21-28.
Magnification—25 Diameters

Lab. No. 95810



Microphotograph of 180 Mesh carborundum—Magnification—25 Diameters.

LABORATORY CERTIFICATE

CURTIS & TOMPKINS

ANALYTICAL-CONSULTING-ENGINEERING
CHEMISTS

236 FRONT STREET
BETWEEN CALIFORNIA & SACRAMENTO STS
SAN FRANCISCO

Laboratory No. 95809/10 May 31, 1928

We have examined your sample

of Diesel Fuel Oil Sludge from Sharples Separator
Received 5/22/28
Marked ----
and found the sample drawn by our representative 5/21/28 at Centrifuge Station of Southern Pacific Company, Oakland Mole, to give the following results:

ANALYSIS

Water	62.2%
Oil & Organic Matter	29.2%
Mineral Matter, Dirt, etc.	8.6%
Total	100.0%

Curtis & Tompkins

INDUSTRIAL & ENGINEERING CHEMISTS

WHAT THESE FIGURES MEAN

100 barrels of oil burned per day.
1 pound of sludge removed from each 20 barrels of oil.
8.6 per cent of sludge is Grinding Compound (Silicious Material is Sand—compare the photographs).

$\frac{100}{20}$ = 5 pounds of sludge.

5 × .086 = .43 pounds of Grinding Compound—KEPT OUT of the Engines each day by Sharples.

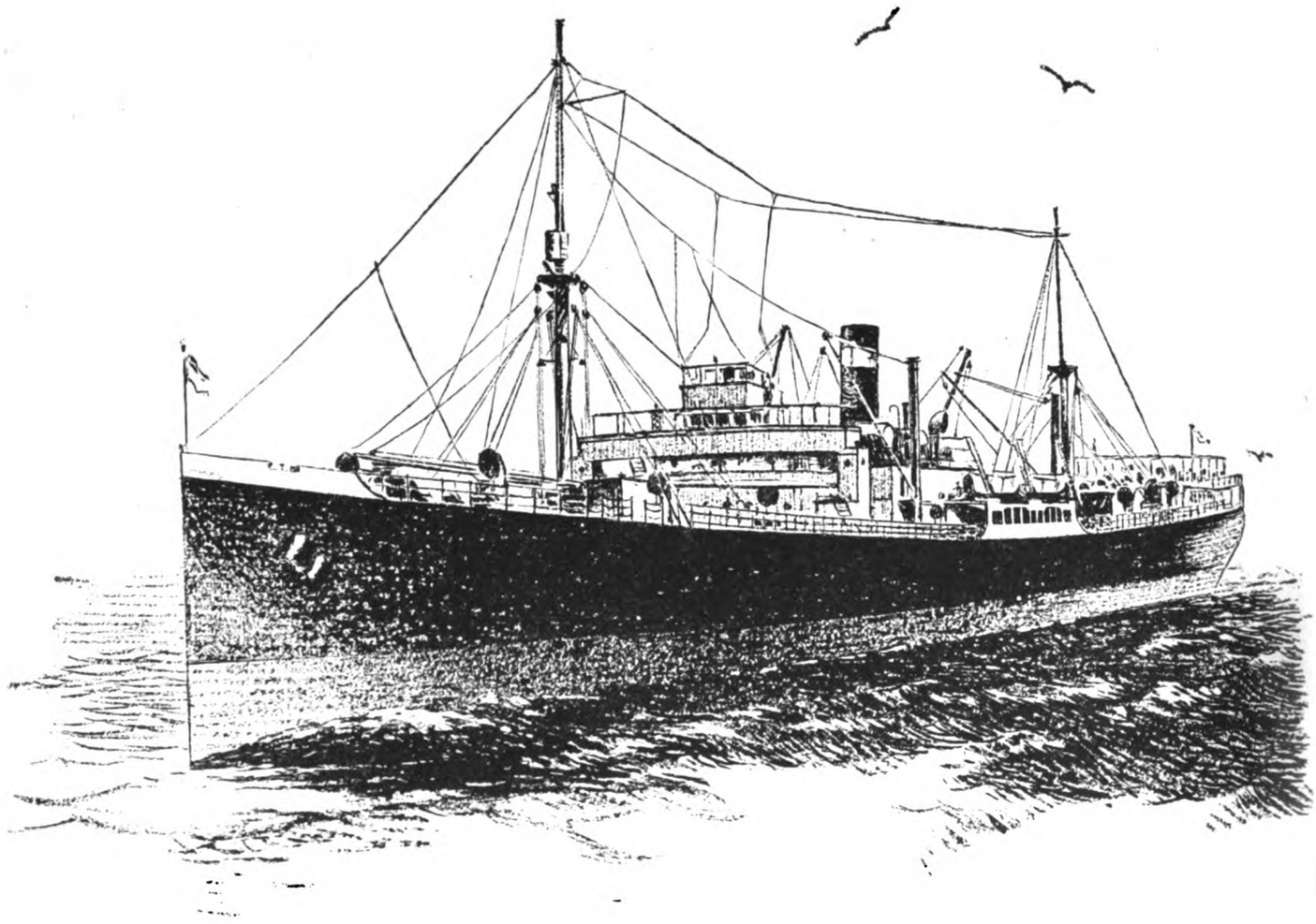
All this from the highest grade, 24° gravity A. P. I. Diesel Fuel ***Oil, purchased under rigid specifications***

THE SHARPLES SPECIALTY CO., 2316 WESTMORELAND ST., PHILADELPHIA
Boston, New York, Pittsburgh, Chicago, Detroit, Tulsa, New Orleans, San Francisco, Los Angeles, Toronto, London, Paris, Tokio

SHARPLES
A GREAT FORCE

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Another Advance in Marine Development



GENERAL

GENERAL ELECTRIC COMPANY, SCHENECTADY, N. Y.

Generated on 2024-09-12 14:20 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

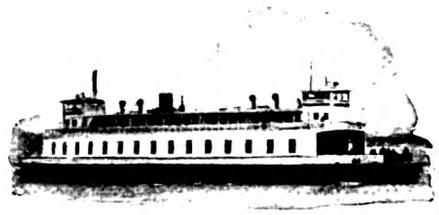
LESS than a decade ago, Diesel-electric drive was but an experiment. To-day, Diesel-electric ships are establishing notable records on river, lake, and ocean. In tugboats, tankers, ferries, dredges, coast-guard cutters, as well as many other vessels, the advantages of this type of drive have been abundantly proved.

The ***Courageous*** marks an important advance in this development. It is the largest vessel on which Diesel-electric drive has yet been installed, with greater s.hp. capacity than any other Diesel-electric vessel now afloat.

To each of the four McIntosh and Seymour Diesel engines are connected an 800-kw. main generator and a 100-kw. auxiliary generator.

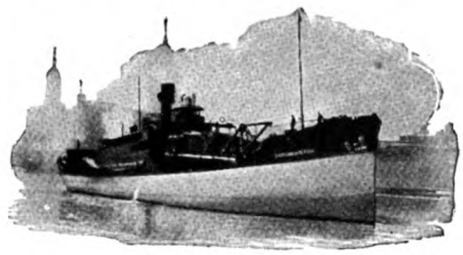
These furnish power for the two 2000-s.hp. main propulsion motors and for the operation of the ship auxiliaries.

General Electric designed and furnished both the main propulsion generators and motors as well as the switchboards and electric equipment for deck and under-deck auxiliaries.

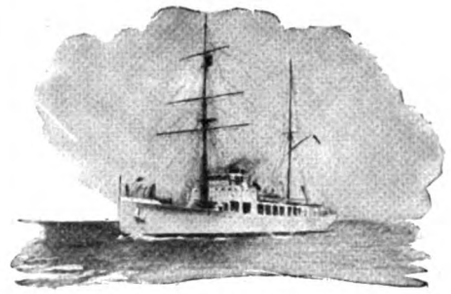


Ferry Golden Gate placed in service in 1922

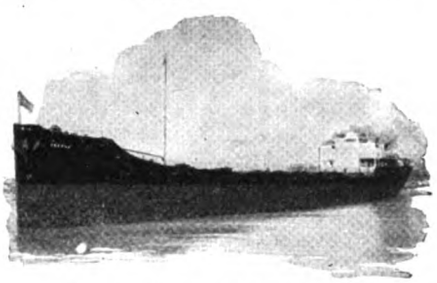
Tugboat Van Dyke No. 3 placed in service in 1924



Dredge Sandmaster placed in service in 1926



Coast-guard cutter Northland placed in service in 1927



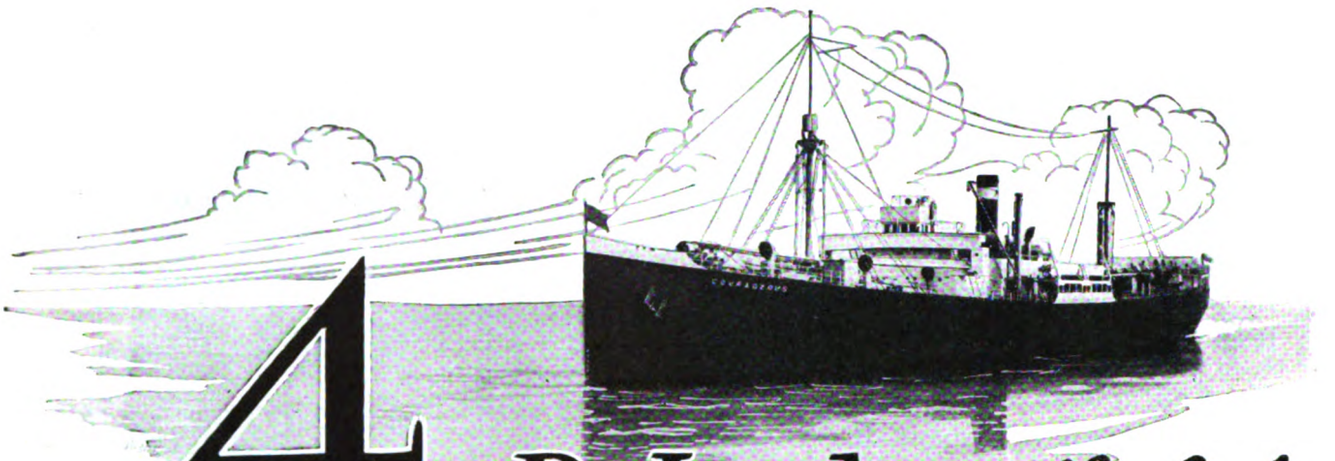
Tanker Sharon placed in service in 1927

123-17

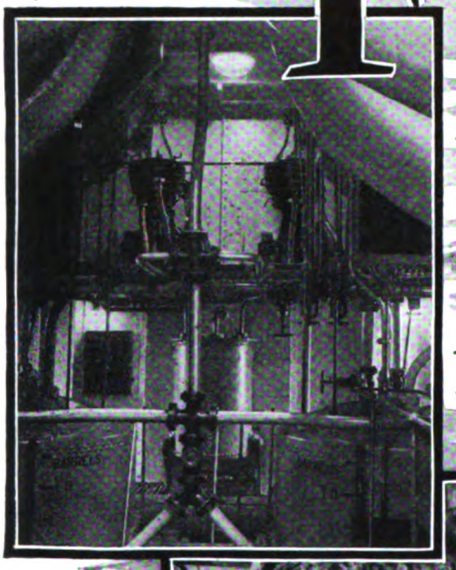
ELECTRIC

SALES OFFICES IN PRINCIPAL CITIES

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



4 De Lavals *purify fuel and lubricating oil ~ ~ ~ on* Ms. Courageous



The upper illustration shows two vapor-tight De Laval Fuel Oil Purifiers installed on the Ms. Courageous. Below it is shown the lubricating oil purification plant, consisting of two more De Lavals. Thus the Courageous uses nothing but clean oil, and carbon and sludge formation is minimized.

DE LAVAL Oil Purifiers are simple to operate and easy to clean. Designed in accordance with sound engineering principles, ruggedly constructed, and operating at relatively low r.p.m., they are exposed to little wear, and upkeep costs are negligible. Hence practically all they save in time, labor and oil may be counted as clear profit.

Types for Lubricating Oil and Fuel Oil

Generated on 2024-09-12 14:20 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

CLEAN lubricating oil lessens bearing wear . . . . clean fuel oil protects valves, pistons and cylinder liners . . . . the combination greatly lowers the cost of operating a Diesel engine.

Four De Laval Purifiers on the Ms. *Courageous* make clean-oil protection absolute. Two of these machines continuously remove impurities from the oil in the lubricating and cooling systems of the four McIntosh & Seymour engines. Two others of vapor-tight construction insure that water and abrasives are not injected into the engines with the fuel.

Thus the U. S. Shipping Board has insured its investment in the world's largest Diesel-electric cargo ship.

Bulletin No. 106-B tells how you can similarly safeguard your own investment.

THE DE LAVAL SEPARATOR COMPANY
165 Broadway, New York 600 Jackson Blvd., Chicago
DE LAVAL PACIFIC COMPANY, 61 Beale St., San Francisco
THE DE LAVAL CO., Ltd., Peterborough and Winnipeg, Canada
ALFA-LAVAL CO., Ltd., 34 Grosvenor Road, London, S. W. 1

DE LAVAL
OIL PURIFIERS
Types for Lubricating Oil and Fuel Oil

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

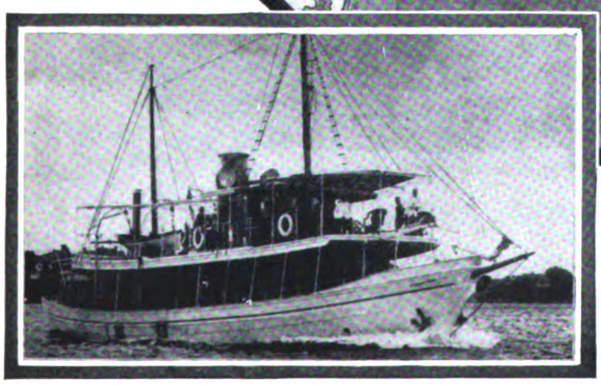
The tug, "Mahoe," bringing the "Hanover" into port at Honolulu. The "Mahoe" is powered with a 360 hp. Fairbanks-Morse Diesel

The "Iruna," a freighter owned by the Insular Navigation Company plies between Cebu and Tacloban in the Philippines. Powered with a 180 hp. F-M Diesel

F-M DIESELS THE WORLD OVER

A New Zealand schooner, the "Kohi," in coastal service driven by two 45 hp. Fairbanks-Morse Diesel Engines

The Harbor Master at Yokohama uses the "Kinsen Maru" powered with a 100 hp. F-M Diesel

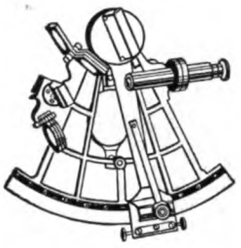


Way down in Papua, New Guinea, the local government employs the "Lauabada" which is equipped with two 100 hp. Diesel Engines

The "San Antonio" between Montevideo and Buenos Aires was recently powered with a 360 hp. F-M Diesel

FAIRBANKS

Generated on 2024-09-12 14:24 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



ON the seven seas—on the rivers of the world—ply craft of all types and all sizes powered with Fairbanks-Morse Diesel Engines. For the Fairbanks-Morse Diesel has earned well its place among the leading marine Diesel engines of the world.

A simple engine—two-cycle, with complete absence of poppet valves in the cylinder heads and cam shaft, tappets and other valve operating parts—a fuel injection system which eliminates high pressure fuel auxiliaries.

Sturdily built, simple in design—Fairbanks-Morse Diesel Engines are adequate to the everyday and emergency service at sea. Little wonder they are chosen for far flung service remote from shop facilities and repair ports.

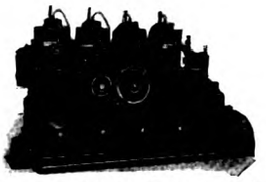
An engine for practically all marine requirements

The Fairbanks-Morse standardized line of Diesel Marine Engines covers a range in single units of 800 hp. to 25 hp.

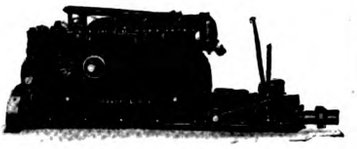
Practically every type of craft can be powered with these engines to obtain lower operating costs.

Also auxiliary Diesels furnishing either compressed air, electric current or both.

The 800 hp. Model 37 F-M Marine Diesel with built-in auxiliaries. Also available in 660 hp. and 520 hp. sizes.



A 4 cylinder Model 35 Marine Diesel. Available in 3 to 6 cylinders. 75 hp. to 360 hp.



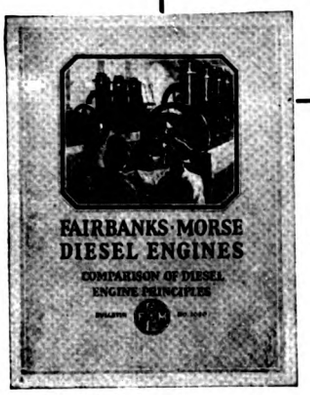
A 4 cylinder Model 34 Marine Diesel, ideal for tenders, small workboats, etc. Available in 2 to 4 cylinders—25 to 45 hp.

FAIRBANKS, MORSE & CO., Chicago

NEW YORK 160 Varick Street
BOSTON 88 High Street
BALTIMORE 115 East Lombard Street
NEW ORLEANS 1000 St. Charles Street
JACKSONVILLE 630 West Bay Street

General Offices: Chicago

Branches with Service Stations in Principal Ports

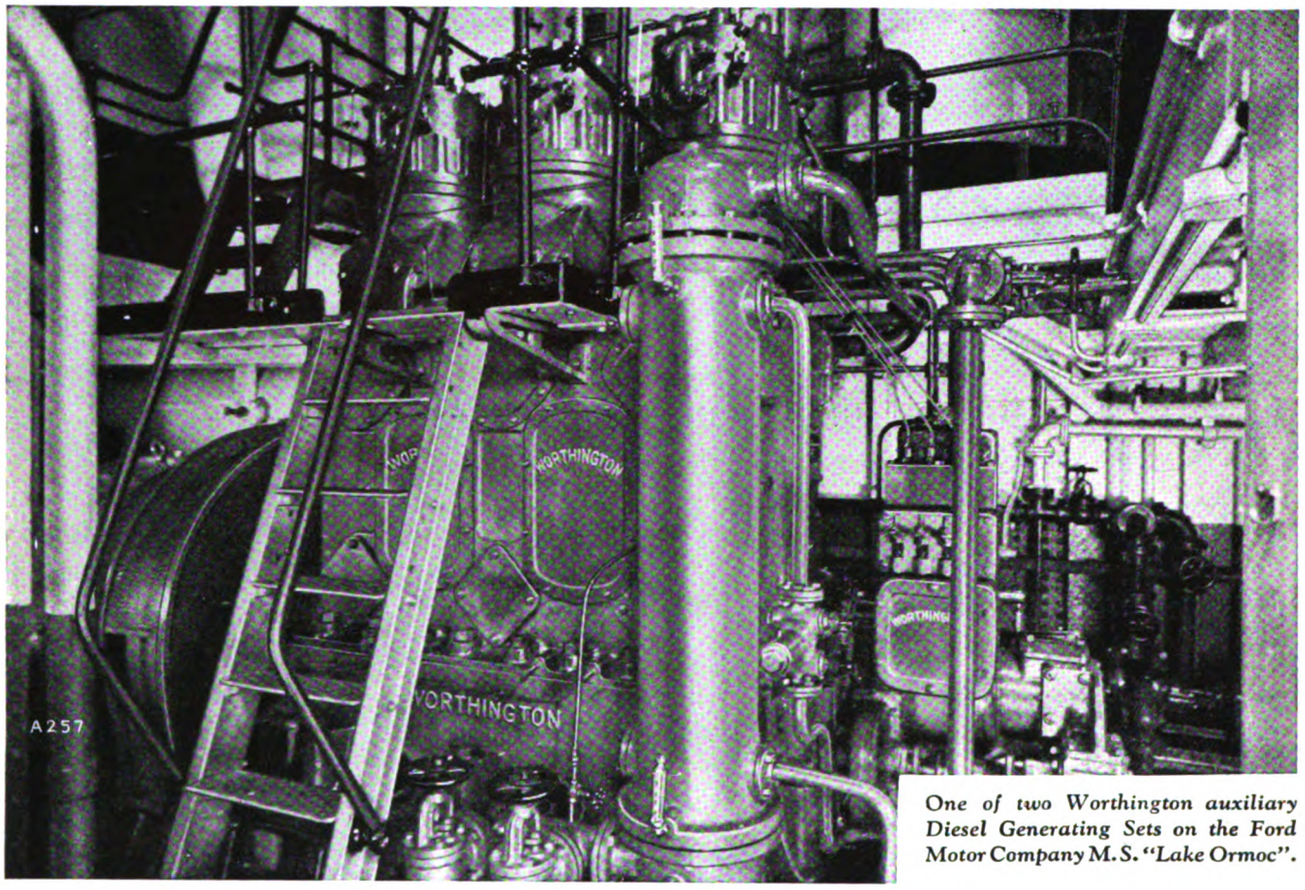


The interesting booklet, "Comparison of Diesel Engine Principles" will be sent on request.

-MORSE DIESEL ENGINES

OA 27.200

Generated on 2024-09-12 14:51 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



One of two Worthington auxiliary Diesel Generating Sets on the Ford Motor Company M.S. "Lake Ormoc".

Worthington Auxiliary Diesels

on Ford Motor Company Motorship "Lake Ormoc"

Two Worthington Diesel engines supply all of the electric current used on this most modern Diesel powered freighter.

Each engine is a three-cylinder, 180-hp. cross-head type, two-cycle, solid injection engine mounted on a common bed plate and direct connected with a 100-kw. 230-volt direct current generator.

Worthington also supplied a variety of motor-driven pumps for this ship, including an 8-in x 12-in H. D. piston pattern power pump, provided with double reduction gears, for lubricating oil-cooler service—and a 4-in. x 6-in H. D. piston pattern power pump with double reduction gears for fuel oil transfer. Also 3 rotary gear pumps, motor driven for oil service.

Where efficiency of operation, economy of space and maximum dependability are at a premium, as in marine service, Worthington equipment will be found giving a good account of itself.

WORTHINGTON

PRODUCTS

PUMPS

COMPRESSORS

CONDENSERS *and Auxiliaries*

OIL *and* GAS ENGINES

FEEDWATER HEATERS

WATER *and* OIL METERS

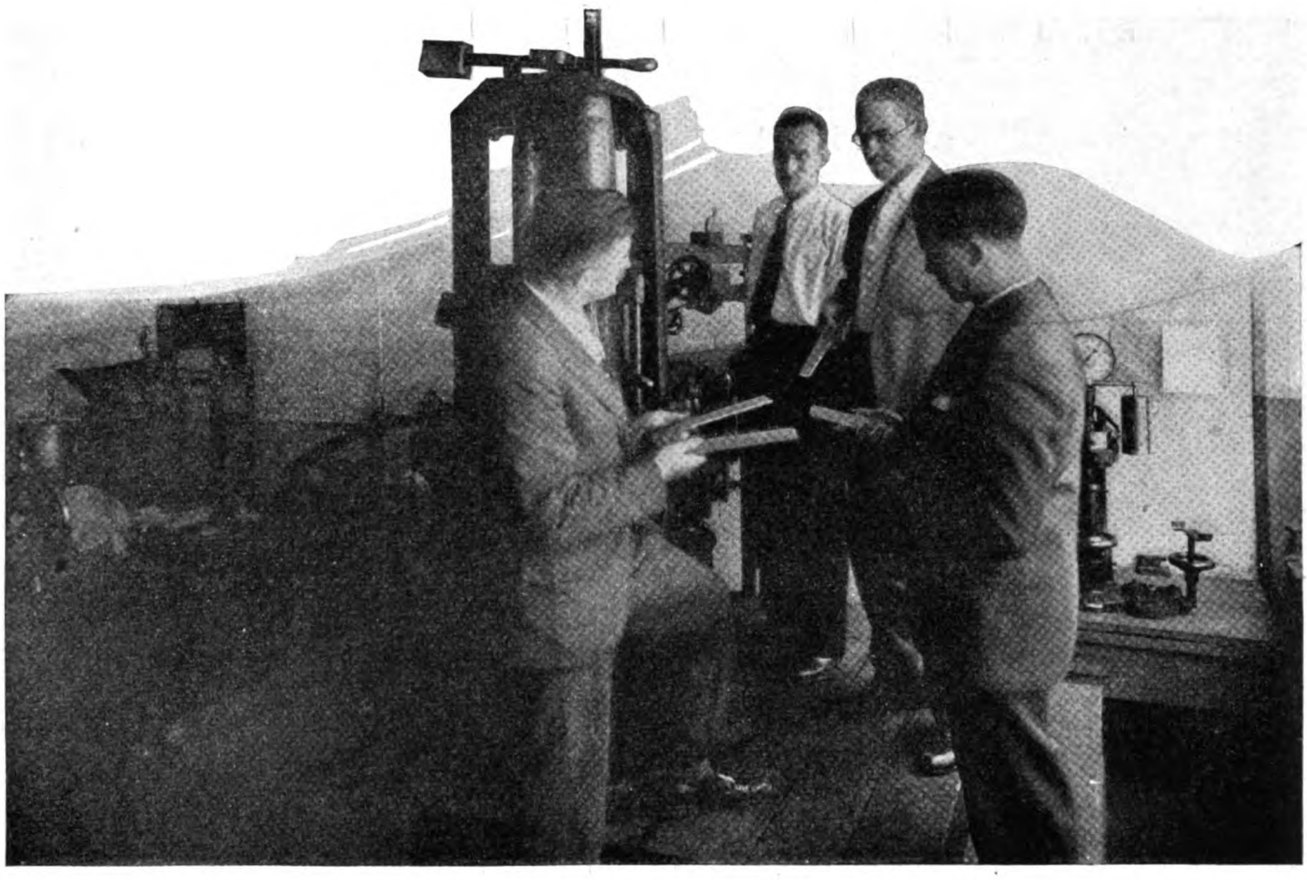
Literature on Request

WORTHINGTON PUMP AND MACHINERY CORPORATION. 2 PARK AVENUE. NEW YORK ◥ DISTRICT OFFICES IN 24 CITIES

WORTHINGTON

6641-13

Generated on 2024-09-12 14:52 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



"Who is *that* man?"

"This is Mr. Robertson, Consulting Engineer of The Linde Air Products Company," said the Chief Engineer.

"When we found that our latest alloy required an entirely new procedure for welding, we called the Linde Company for help. They submitted the problem to their Research Laboratories, who have worked out a way to weld this new alloy successfully.

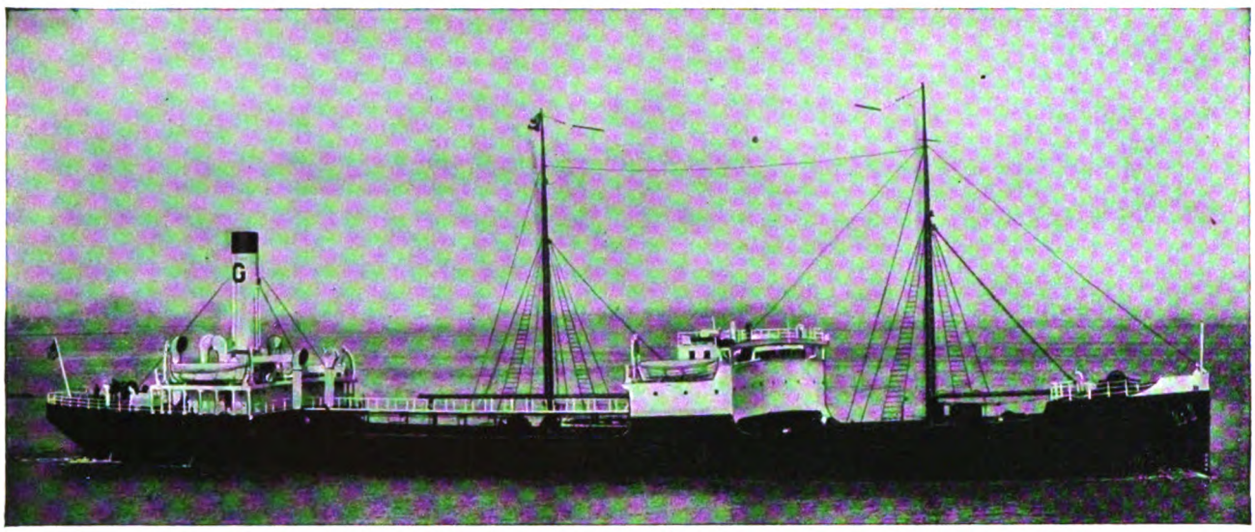
"Mr. Robertson has furnished us with what they call a Procedure Control—detailed instructions for doing the work. These are specimen welds made by their new method. We've just finished testing these coupons for tensile strength. Every one broke outside the weld at a figure far beyond our maximum requirements."

HUNDREDS of practical and theoretical problems involving the Oxy-Acetylene process are constantly being studied in the Union Carbide and Carbon Research Laboratories. The results of these studies as well as help on any special problems that may come up are available to Linde customers through Linde Process Service. Linde Process Service is one of the reasons that Linde Oxygen is the leader in its field.

THE LINDE AIR PRODUCTS COMPANY
Unit of Union Carbide UCC *and Carbon Corporation*
General Offices: Carbide and Carbon Building
30 East 42d Street, New York
54 PLANTS · 98 WAREHOUSES

LINDE OXYGEN

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



Motorship tanker "Los Alamos." Length, 292 ft. Beam, 47 ft. Full-load draft, 26 ft. 9 in. Deadweight capacity, 5500 tons. Speed 10 knots. Propulsion power, two 960-i.hp. McIntosh & Seymour Diesel Engines. Fuel consumption, about 11 tons per day.

This tanker became profitable only after installing high-grade Diesel engines

The "Los Alamos" became a satisfactory carrier only after smaller engines of the surface ignition type were taken out and replaced with the more dependable and more powerful McIntosh & Seymour Diesels. Since the replacement she has handled cargos of oil between American, European and Far Eastern ports and has shown herself well able to meet every demand.

Sustained low fuel rate, uninterrupted running, good maneuvering qualities and freedom from machinery annoyances demand well built and well kept engines.

McIntosh & Seymour Main and Auxiliary Marine Units leave nothing to be desired in the design, material and workmanship, and they are easily kept in prime condition by men with limited experience. Selecting these sturdy units is the best protection to operating profits in the after years, because those few parts that do have to be renewed on account of normal wear, are inexpensive and when placed, completely restore the initial efficiency and economy.

If you want adequate care-free power, dependable year-in year-out in any seas or weather, our Engineers are ready to submit convincing proof that it is best obtainable from McIntosh & Seymour Diesel Engines.

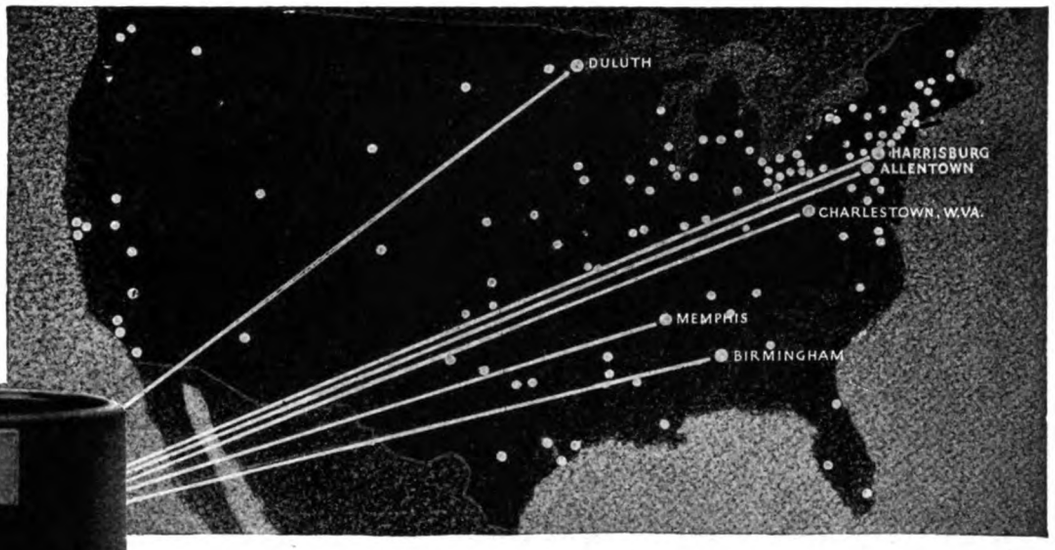
Write for our new Marine Bulletin.

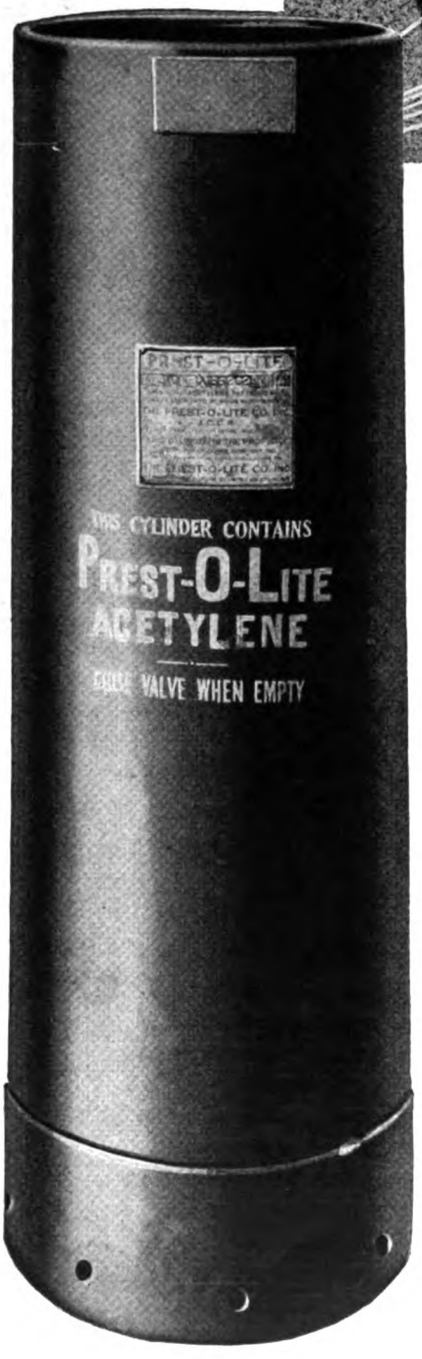
McIntosh & Seymour Corp., Main Offices and Works: Auburn, N. Y.

New York City Kansas City, Mo. Jacksonville, Fla. Houston, Tex. San Francisco

McINTOSH & SEYMOUR MOTOR SHIPS

Generated on 2024-09-12 14:18 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN





Six new reasons for buying

Prest-O-Lite

DISSOLVED ACETYLENE

THE FACT that Prest-O-Lite could be readily obtained direct from plants or warehouses in most of the industrial centers of the country has been one reason for its tremendous success.

But the nation-wide demand has been steadily growing. To keep pace with this increased business, six new manufacturing plants have been placed in operation during the past year.

And now, with a total of 35 plants and 100 warehouses, Prest-O-Lite is equipped to render industry even greater service.

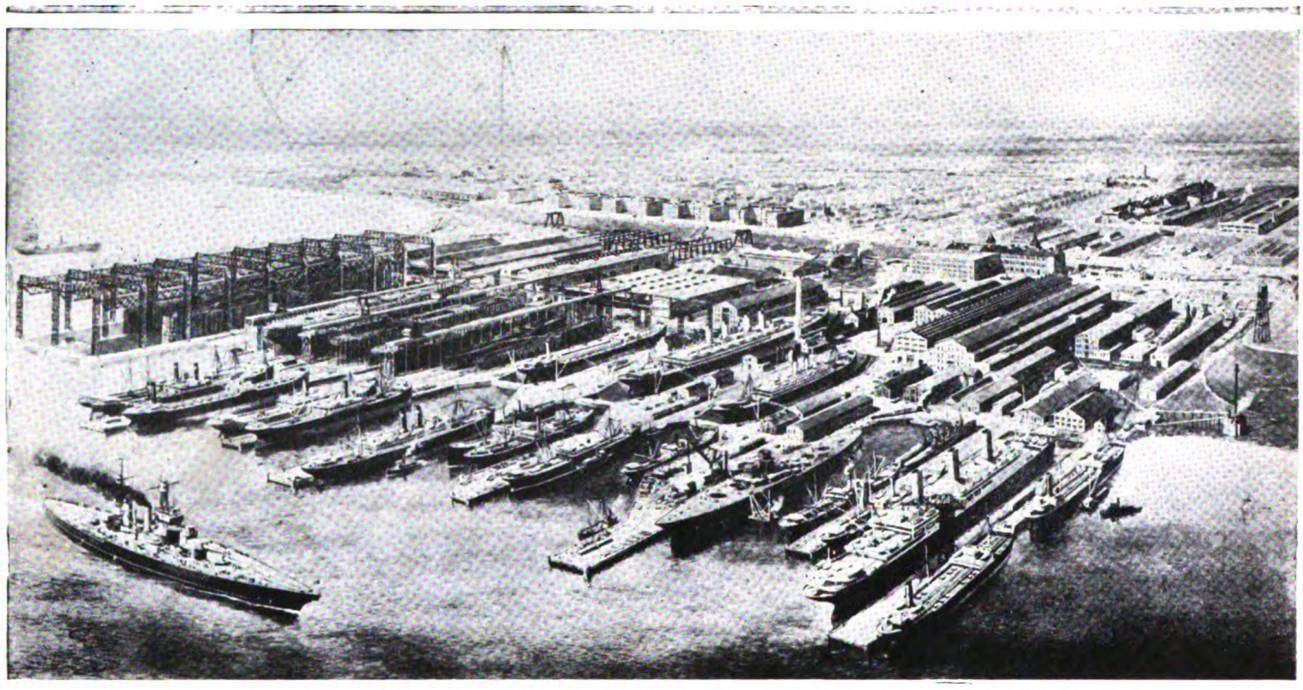
THE PREST-O-LITE COMPANY, INC.

Unit of Union Carbide UCC *and Carbon Corporation*

GENERAL OFFICES: Carbide and Carbon Building
30 East 42d Street, New York

Generated on 2024-09-12 14:30 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Shipbuilding and Repairing facilities unsurpassed in America



FOUNDRIES
FORGES
JOINER SHOP
3
LARGE
GRAVING
DOCKS

Here ships are completely overhauled and refitted at the same time

RESOURCES, capacity, experience and facilities are found here in a combination which develops the highest efficiency in the building, converting and repairing of ships.

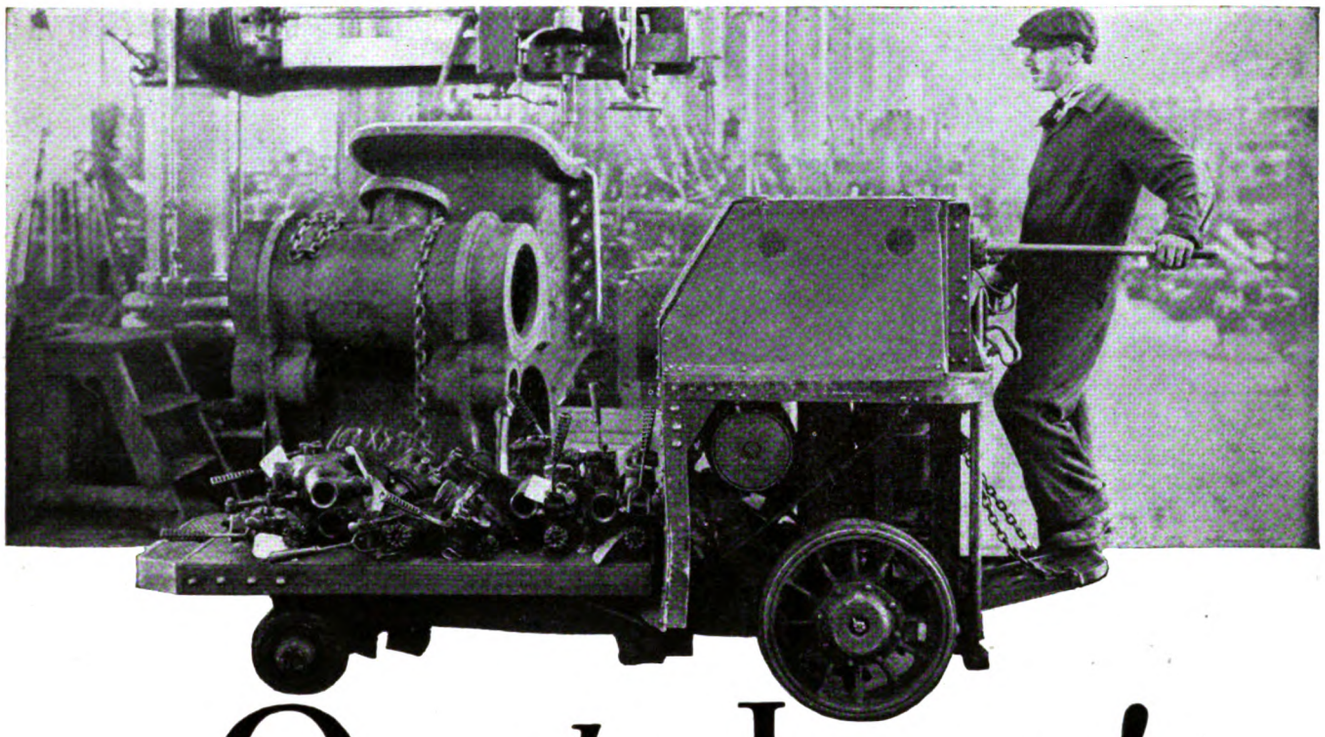
In the final analysis, it is the proven economy, consistently demonstrated in all classes of work which has placed this organization at the head of preferred shipyards.

Every detail of construction, inspection and test are performed with an accuracy and thoroughness that insure maximum ship safety and operating economy.

Newport News Shipbuilding and Dry Dock Co.

Newport News, Virginia *223 Broadway, New York City*

Generated on 2024-09-12 14:51 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



On the Jump!

...right up to quitting-time

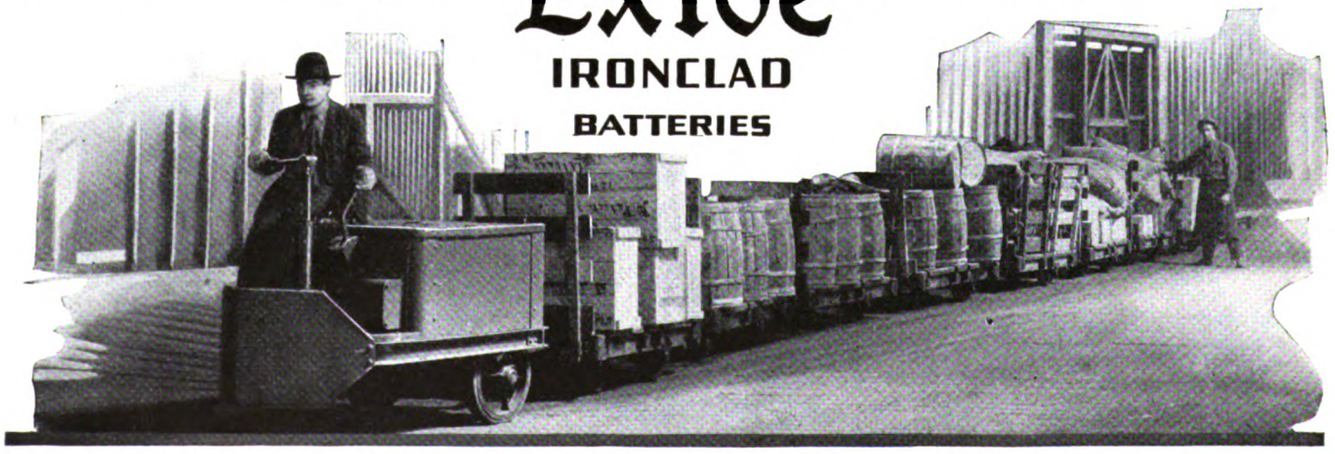
"LAST-HOUR" handling costs are as low as during the rest of the day when electric industrial trucks are powered with Exide-Ironclad Batteries. These batteries have a sustained speed that keeps electrics moving fast *right up to quitting-time.*

It's the voltage that does it. High voltage means good speed. And an Exide-Ironclad maintains a consistently high voltage *all day long.*

The Exide-Ironclad moves material quickly under *any hauling condition.* It has high power ability—a steady flow for level hauling, or a sudden rush of current to climb steep ramps or start heavy loads rolling.

This battery cuts costs at the charging panel, too. It takes in current quickly, easily and with little waste. And the Exide-Ironclad stays on the job for years. Its special positive plate construction gives it an unusually long active life. If you are interested in finding a way to move *more* material, faster and *cheaper* than ever before, ask any Exide-Ironclad user about this battery. We'll let his cost figures tell their own story.

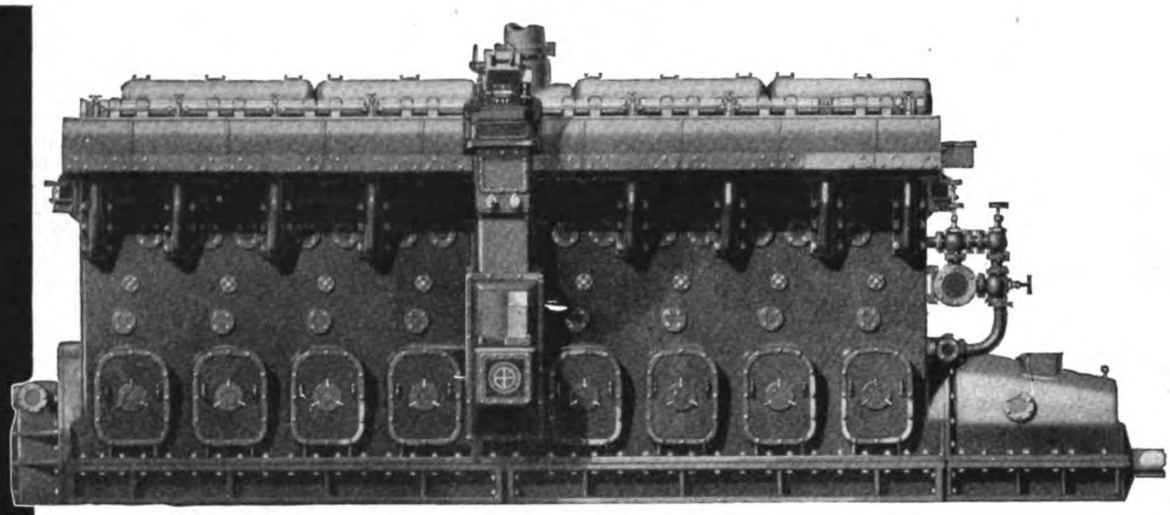
Exide
IRONCLAD
BATTERIES



THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia

Exide Batteries of Canada, Limited, Toronto

Generated on 2024-09-12 15:01 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

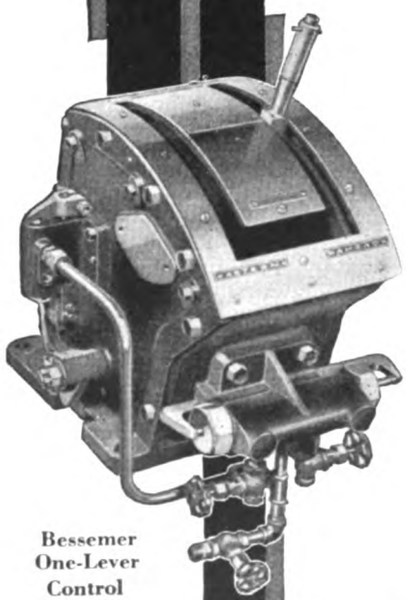


Foresight or Obsolescence

BECAUSE of Bessemer's engineering foresight, the Bessemer Diesel of today is the standard of tomorrow. Observe the clean-cut appearance of the "Modern Bessemer Diesel", note its accessibility, its ruggedness and its simplicity. These are all features which suggest the reliability, longevity and smoothness of operation for which Bessemers are famous.

Remember, when you buy a Bessemer you secure the results of vast sums expended in the development and perfection of modern internal combustion engines. When you select a Bessemer you need have no fear of the old saying "Obsolescence is the twin brother of fire." Because Bessemer is the leader today and will be the standard of tomorrow.

Let us tell you more of this Proven, Modern Diesel Engine — built in sizes up to 1500 H. P.



Bessemer One-Lever Control

BESSEMER ENGINE COMPANY
12 Lincoln Ave. ∴ ∴ Grove City, Pa.

"You buy the best when you buy the Bessemer"

Boston, Mass., 131 State St. New York, N. Y., 50 Church St.
New York, N. Y., Earl H. Croft, Inc., 25 W. 43rd St.
Washington, D. C., 1109 National Press Bldg.
New Orleans, La., 604 Southern Bldg.
Chicago, Ill., A. McMillan Los Angeles, 727 Standard Oil Bldg.
Pittsburgh, Pa., 815 Bessemer Bldg.
San Francisco, V. A. Stout, 806 Fife Bldg.

BESSEMER

Generated on 2024-09-12 14:25 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Photo—Underwood & Underwood

The Ship of the Future

will be AUTOMATIC-ELECTRIC

The old is giving way to the new!

MARINE engineers and their engineering accomplishments are creating new marvels afloat. Sit back a moment and think of the vast improvements that have come with electricity, and in a comparatively few short years ... dependable electric light, automatic electric signal systems, electric winches, and capstans, electric steering, electric refrigeration, electric pumps ... and on and on. The old gives way to the new because the *electric* way has proven the better way. Old precedents and conservatism cannot stem the tide.

On increasing numbers of the finest, most efficient, modern ships Edison *electric* galleys are continuing to *prove* their many practical advantages and superiorities. And the Edison *electric* galleys of these ships will still be modern long years from now when others become obsolete. *They will keep pace!* And they will save money every year, because of their *lowest maintenance cost of any type of marine galley equipment.*

The electric galley of the ship of the future is available, perfect, *today.*

Whether you are interested in a tug, dredge, ferry, freighter, or a great passenger liner—let us give you data from proven experience on similar vessels. You owe it to yourself to have at hand complete, up-to-date information on the practical advantages of a most efficient, compact Edison electric galley.

Write us—or mail the coupon.

Edison Automatic Electric Marine Range

Why modern ships are installing Edison electric galleys

Safety—There is no flame, therefore the hazard of galley fires is banished.

Upkeep—Repairs and depreciation are lowest in the world; far lower than for fuel equipment.

Fast—Quick service, always available instantly at the snap of a switch.

Cleaner—No coal, ashes, oil, soot. Just *pure Heat.*

Cooler—Electricity permits *direct* application of heat with minimum radiation losses. What an amazing difference electric equipment makes in summer or hot latitudes.

Saves Deck Space—Electric construction is more efficient and compact, giving greater production per square foot. Also saves fuel storage space.

Ventilation—An electric galley can be located anywhere in the ship with less provision for ventilation since there is *no combustion of air* or excessive heating.

No Ashes to Handle.

Quieter.

Simpler Construction—No fuel or steam lines needed.

Dependability—Edison electric equipment alone uses the practically indestructible, patented CALROD electric heating element.

A Surprisingly Low Operating Cost.

A few modern ships with Edison electric galleys

S. S. Leviathan	U. S. S. Oklahoma
S. S. Republic	U. S. S. Wyoming
S. S. Malolo	U. S. S. Arizona
S. S. Maui	U. S. S. Nevada
S. S. California	U. S. Army Dredges
S. S. Virginia	S. S. Aeolus
Dollar Steamship Line—12 ships	Standard Oil tankers
Pacific Steamship Company—H.F.Alexandria	Munson Line steamships
Admiral Line	U. S. S. Saratoga
	U. S. S. Lexington
	U. S. S. Langley

Many reconditioned ships, as well, have installed Edison electric galleys

EDISON

EDISON ELECTRIC APPLIANCE CO., Inc.
A GENERAL ELECTRIC ORGANIZATION

5666 West Taylor Street, Chicago, Illinois
Factories: Chicago, Illinois, and Ontario, California
Branches and Service Stations in Principal Cities

EDISON ELECTRIC APPLIANCE CO., INC.,
5666 West Taylor St., Chicago, Ill.

Please send complete literature on Edison Electric marine galley equipment.

Remarks.....

Name.....

Address.....

Generated on 2024-09-12 15:01 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

A silent centrifugal . . .

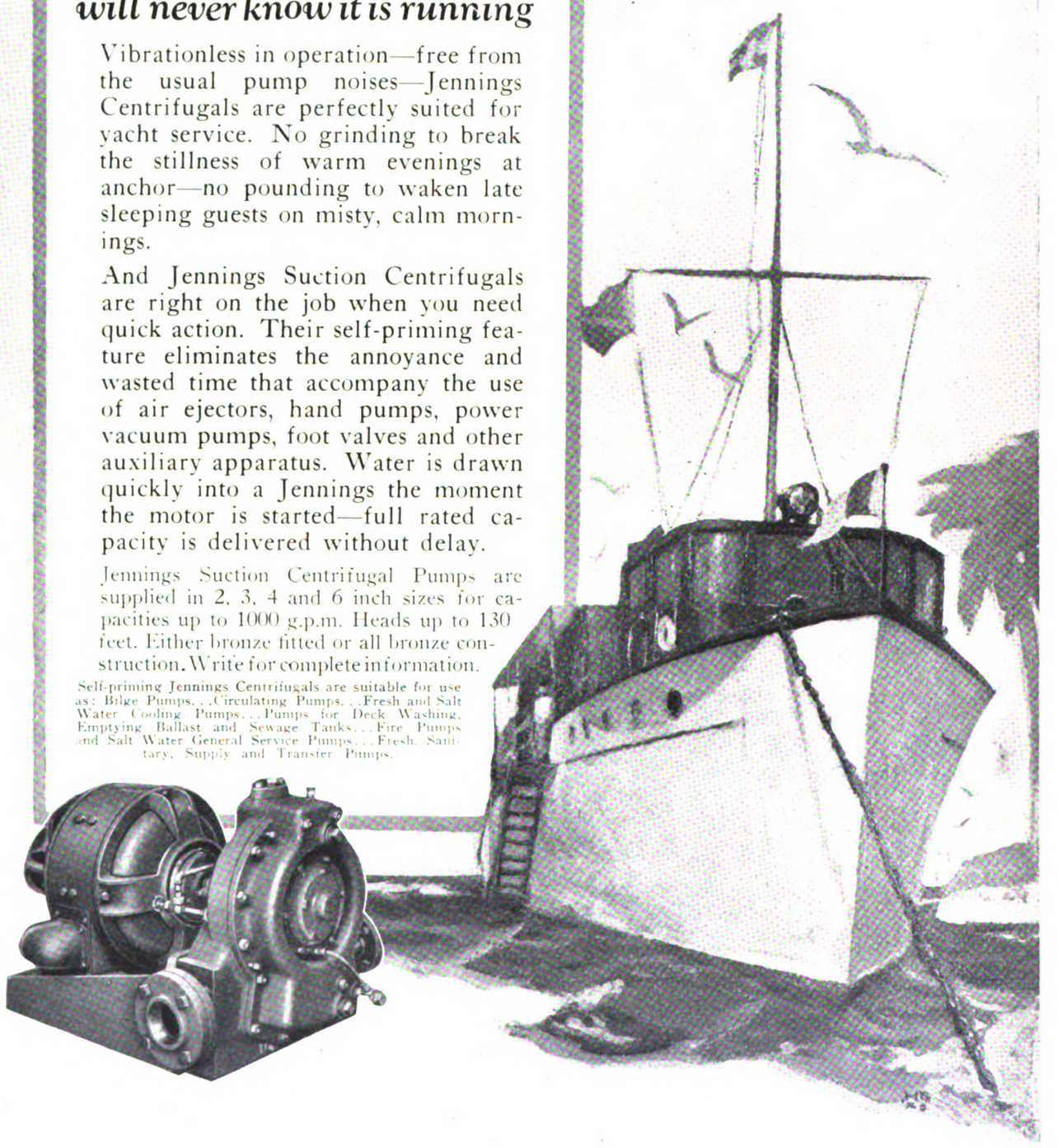
. . . so quiet that guests will never know it is running

Vibrationless in operation—free from the usual pump noises—Jennings Centrifugals are perfectly suited for yacht service. No grinding to break the stillness of warm evenings at anchor—no pounding to waken late sleeping guests on misty, calm mornings.

And Jennings Suction Centrifugals are right on the job when you need quick action. Their self-priming feature eliminates the annoyance and wasted time that accompany the use of air ejectors, hand pumps, power vacuum pumps, foot valves and other auxiliary apparatus. Water is drawn quickly into a Jennings the moment the motor is started—full rated capacity is delivered without delay.

Jennings Suction Centrifugal Pumps are supplied in 2, 3, 4 and 6 inch sizes for capacities up to 1000 g.p.m. Heads up to 130 feet. Either bronze fitted or all bronze construction. Write for complete information.

Self-priming Jennings Centrifugals are suitable for use as: Bilge Pumps. . .Circulating Pumps. . .Fresh and Salt Water Cooling Pumps. . .Pumps for Deck Washing, Emptying Ballast and Sewage Tanks. . .Fire Pumps and Salt Water General Service Pumps. . .Fresh, Sanitary, Supply and Transfer Pumps.

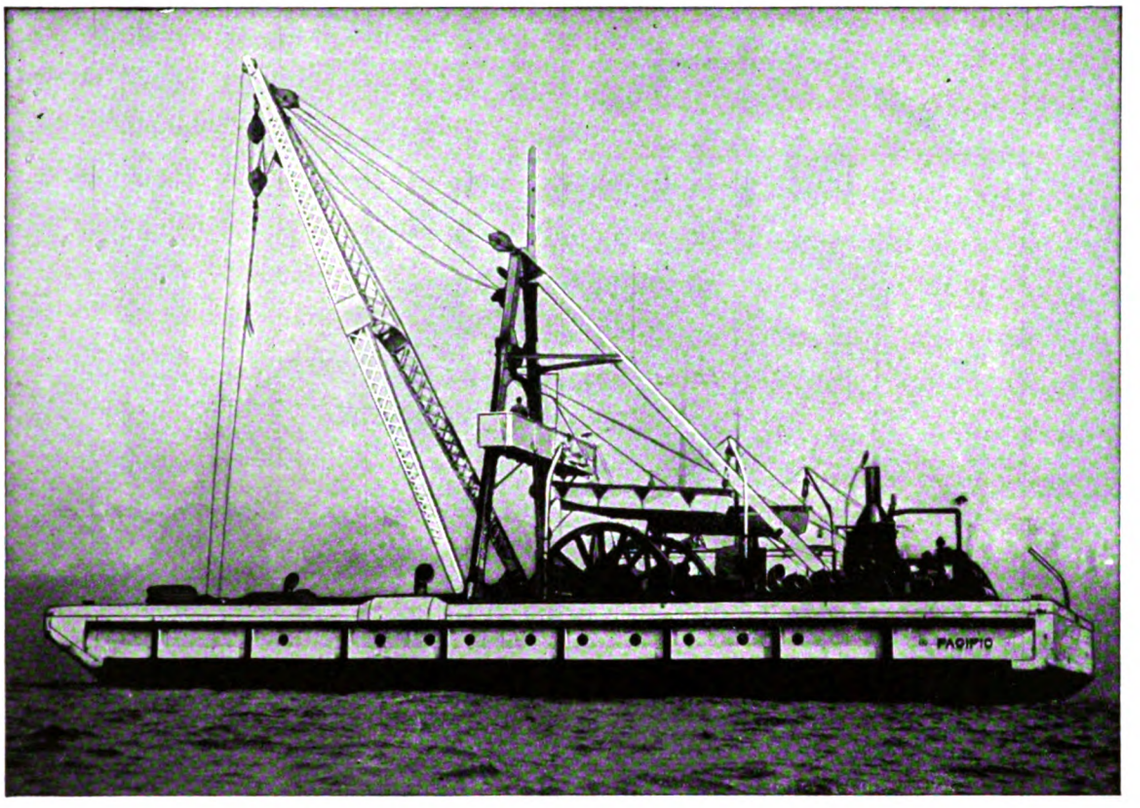


Jennings Pumps

THE NASH ENGINEERING CO 132 WILSON ROAD, SOUTH NORWALK, CONN.

Generated on 2024-09-12 14:20 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

ELLIS STEEL HULLS ARE STRONG



Another Great Company adopts Ellis Channel System

Among recent boats built under the Ellis Channel System of Steel Hull Construction is the "Pacific," a $100,000 cable barge for the Pacific Telephone & Telegraph Company. This barge is getting the toughest kind of service in San Francisco and along the western seaboard—laying, maintaining, and repairing submarine and telegraph cable. Its equipment, like the system of construction, is modern in every way. It includes a 25-ton derrick and a 15,000-foot four-inch cable reel, both driven by steam, as well as electric light and electric welding plants. Thirty-five to forty men can live and eat aboard ship.

The Ellis System, due to its low cost maintenance and construction, seaworthiness, and export portability, is the choice of leading owners and builders everywhere. Detailed information on request.

ELLIS CHANNEL SYSTEM

INCORPORATED PATENTED

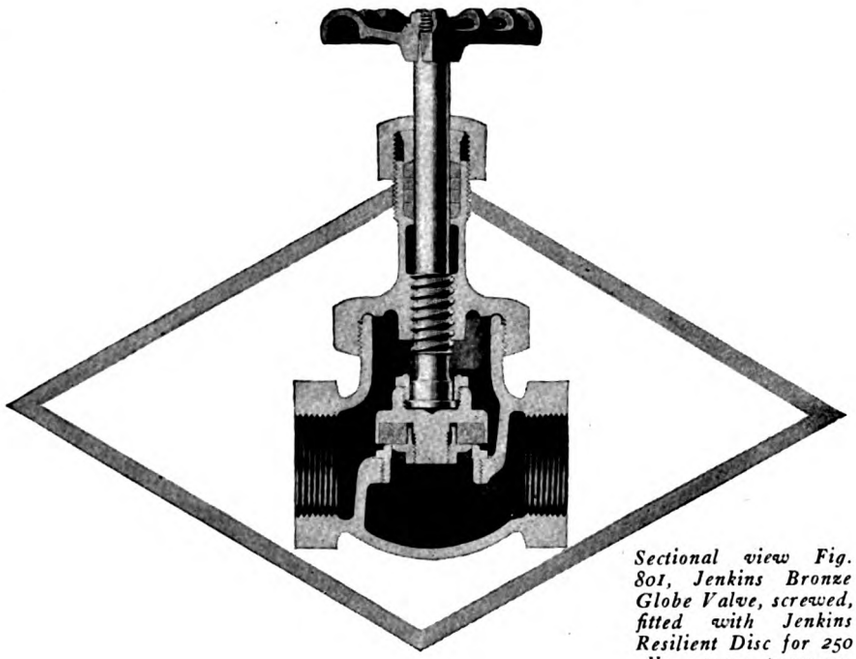
Atlantic Division
ATLANTIC ELLIS CHANNEL SYSTEM, INC.
33 Rector St., New York

Pacific Division
ELLIS CHANNEL SYSTEM, INC.
3200 26th Ave. Southwest, Seattle, Wash.

Great Lakes Division
MANITOWOC SHIP BUILDING CORP., INC.
Manitowoc, Wis.

Central & South American Division
FOX BROS. & CO., INC.
33 Rector St., New York

Generated on 2024-09-12 14:40 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



Sectional view Fig. 801, Jenkins Bronze Globe Valve, screwed, fitted with Jenkins Resilient Disc for 250 lbs. steam pressure

A new Jenkins Valve for 250 pounds steam

A new Jenkins Valve has recently been launched which should prove of great use to marine engineers. It is a bronze valve with resilient Jenkins Disc for steam pressures to 250 pounds.

A glance at the sectional view shows plainly the following features:—(1) follower and deep stuffing box, (2) All bonnet threads in contact with the spindle, (3) bonnet screws over body, rounded body bonnet joint. (4) seat ring and resilient disc, both renewable.

These valves possess all the advantages of standard Jenkins Valves with renewable Jenkins Disc, as well as a number of important new features. They are made in globe, angle, cross and check patterns, both screwed and flanged, in sizes from ¼" to 2".

They are described in detail in a recent folder which we will gladly send on request.

JENKINS BROS.

80 White Street.....New York, N. Y.
524 Atlantic Avenue.....Boston, Mass.
133 No. Seventh Street..Philadelphia, Pa.
646 Washington Boulevard...Chicago, Ill.

JENKINS BROS., Limited
Montreal, Canada.....London, England

FACTORIES:
Bridgeport, Conn. .....Elizabeth, N. J.
Montreal, Canada

Always marked with the "Diamond"

Jenkins Valves

SINCE 1864

Fig. 801
Jenkins Bronze Globe Valve, screwed, for 250 lbs. steam pressure

Fig. 807
Jenkins Bronze Horizontal Check Valve, screwed, for 250 lbs. steam pressure

Fig. 803
Jenkins Bronze Angle Valve, screwed, for 250 lbs. steam pressure

Fig. 142
Jenkins Standard Iron Body Globe Valve Flanged

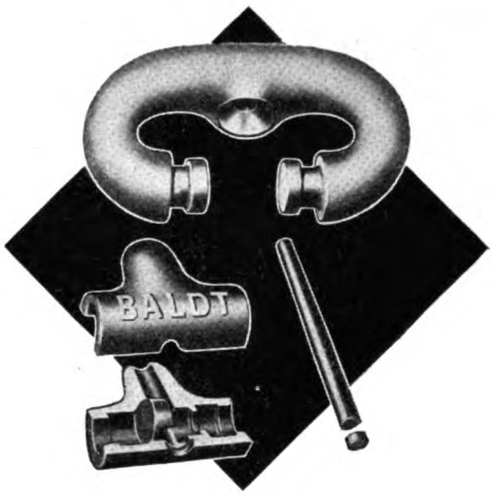
Fig. 204
Jenkins Extra Heavy Iron Body Gate Valve, Flanged

Generated on 2024-09-12 14:24 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

The Old Way

A NEW BALDT PRODUCT

A Detachable Link for Stud Link Chain



AFTER years of experimenting we are offering to the trade a detachable link with a strength more than double that required for ordinary chain.

It is made of steel, drop forged, and will pull 125,000 lbs. per square inch.

It is the same length and pitch as the ordinary common links in chain and may be used as a repair link.

Difficulty has always been experienced in end links and shackles passing over the wildcat. You can now burn off your end links and join the shots together with this link and you will have all links alike and the chain will ride freely over the wildcat.

After the link is put together and taper pin is driven in place a lead slug is driven into the recess securing the pin. Pins are made of stainless metal and can easily be removed.

Baldt

ANCHOR, CHAIN & FORGE CORP.

CHESTER, PA.

Manufacturers of the original stockless anchor

The New Way

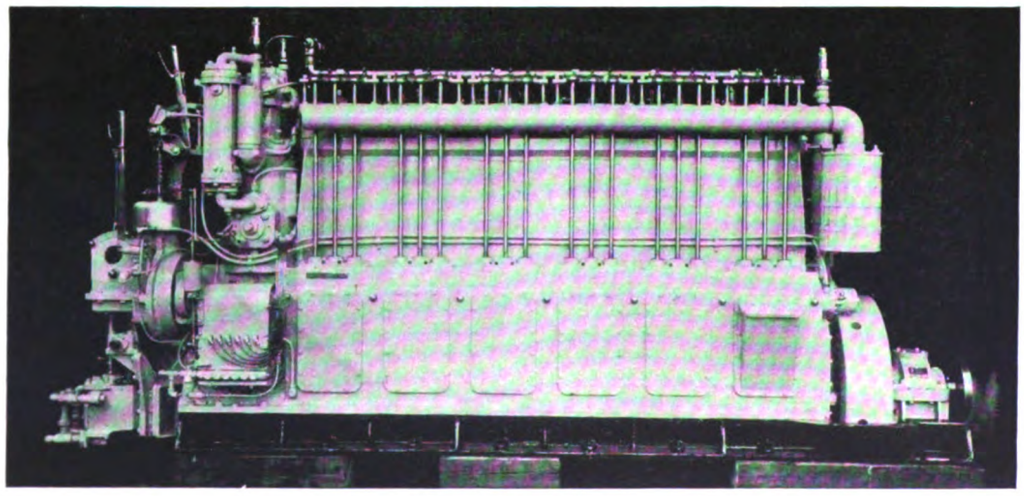
Generated on 2024-09-12 14:53 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Winton Power and Economy

THE steam power plant in the towboat Aubrey, owned by the American Construction Company, Cleveland, Ohio, was replaced in April, 1928, by a Winton-Diesel Engine.

Since then the boat has done 25% more work in the same amount of time, with two less men in the crew. Four months' continued operation without refueling. Fuel cost reduced two-thirds. Demonstrated economy such as this shows how Winton-Diesel Engines contribute to profitable towboat operation.

The Winton Engine Company
Cleveland, Ohio, U. S. A.



Generated on 2024-09-12 14:58 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Great Moments In American Marine History

S. S. Virginia
Largest passenger vessel ever built in America. Length - 613 ft. Displacement—34,000 tons Launched—August 18, 1928.

In 1928

THE present year brought one of the greatest moments in the history of America's Merchant Marine. The enactment of the Jones-White Shipping Bill immediately created a widespread feeling of optimism throughout the entire marine industry.

As a result the coming year will see the construction of a large number of vessels on both coasts.

Before any specifications are completed, both shipowners and shipbuilders should consider the maintenance economies that can be effected by using BURDEN IRON RIVETS below the water line.

BURDEN RIVETS are made from *genuine puddled iron*—one of the greatest corrosion-resisting materials known to mankind.

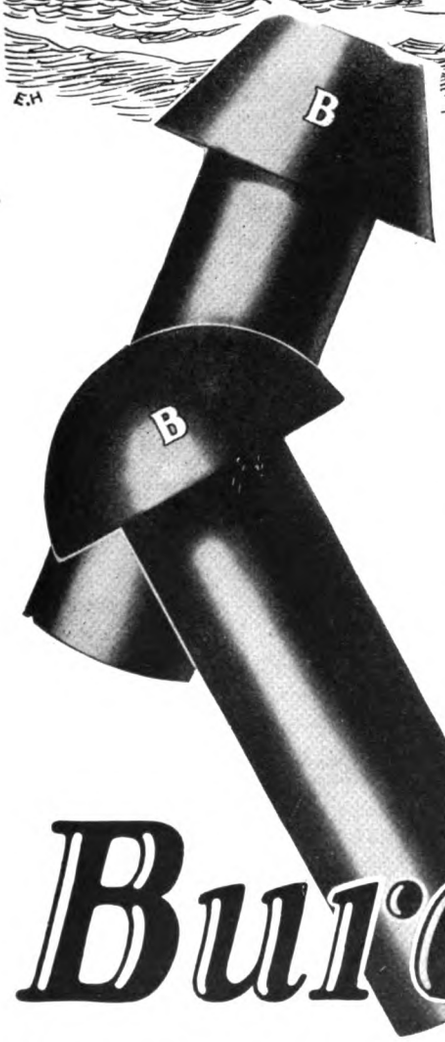
The slight additional cost of BURDEN IRON RIVETS, over those made of steel, will be returned a thousand fold by the savings in future drydock repairs.

Don't let corrosion eat your profits away.

The Burden Iron Company

Troy
New York, N. Y.

New York
Chicago, Ill.



Burden IRON RIVETS

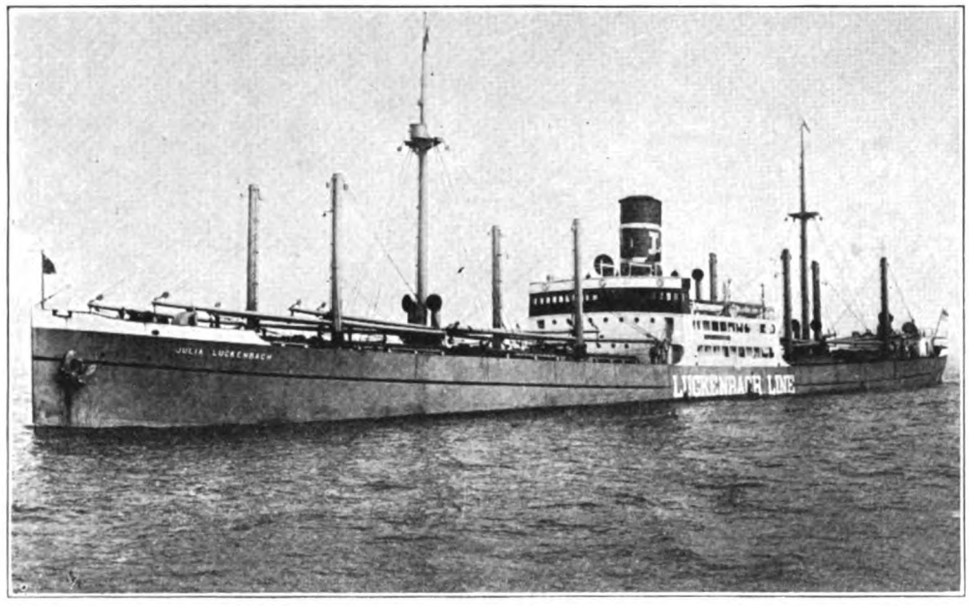
"The Sea Proves Them Best"

Generated on 2024-09-12 14:56 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

"John Crane"

Metallic Condenser Packing

New Method of Assembly Without Ferrules

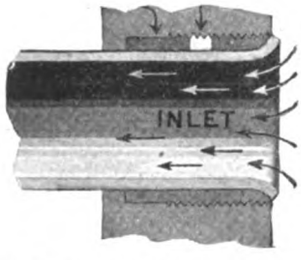


Installed in the S. S. Julia Luckenbach and Many Other Ships of this Great Line

Tighter Condensers —Safer Boilers

The Choice of Luckenbach Engineers

Prominent among America's finest merchant fleets is the Luckenbach. Their position indicates their wise administration.

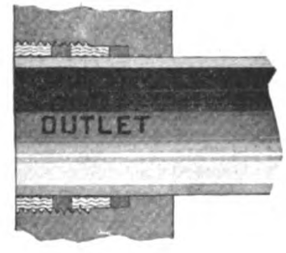


We are proud to supplement our announcement of last month regarding the Isthmian Steamship Company with a similar report on the great Luckenbach line.

They too use "John Crane" Metallic Packing in their condensers. The new method of assembly without ferrules, as the illustrations show, is the most efficient condenser packing ever developed.

They are finding this new method decidedly economical and considering the large saving in ferrules and labor, the entire process can be made quite within the cost of the corset lace job.

No ferrules are required with metallic packing. Caulking of metallic rings locks them into the thread. Tubes contract and expand freely through metallic packing. Metallic packing does not deform the tube ends. Metallic packing bonds the tube to the tube sheet, which feature has proven helpful in preventing electrolytic decomposition. Metallic packing resists high temperature. Condensers may go to atmosphere without the least damage to the packing. Our new Bakelite Treated Endless Metallic Rings now withstand the worst contaminated river waters of the world.



Inquire about "John Crane." Call on our Service branches for recommendations and estimates.

Marine Service Department

We announce the inauguration of our Marine Service Department to make inspections of condensers, to give reports of troubles, to make complete estimates for repacking and to give recommendations for improved efficiency. This service rendered without cost.

Marine Service Branches of the Crane Packing Company:

21 Bridge St., New York Whitehall 9185	524 Poydras St., New Orleans Raymond 3441	108 Walnut St., Philadelphia Lombard 6740	306 Canton House Baltimore Calvert 5829	667A Howard St., San Francisco Sutter 3524

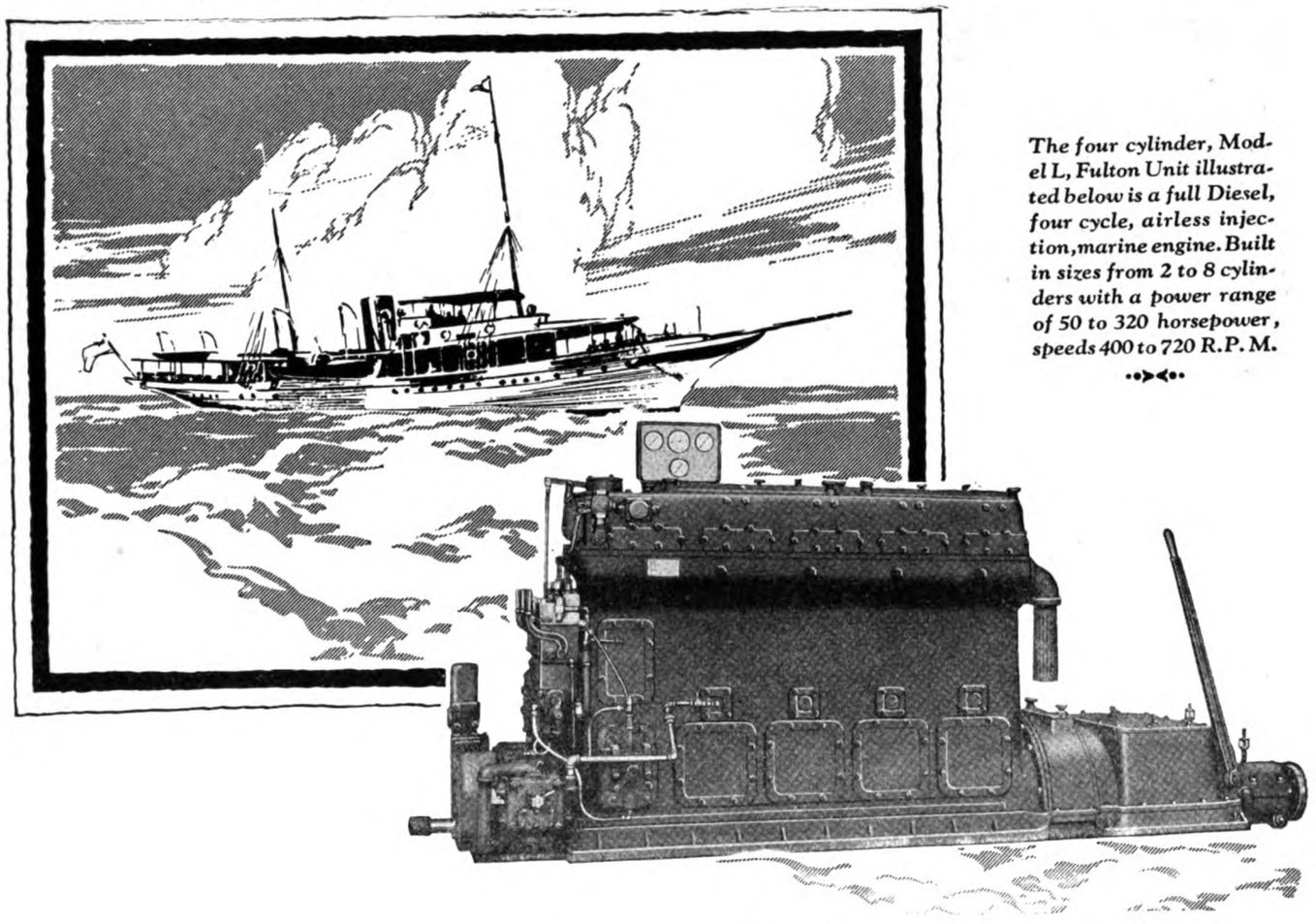
CRANE PACKING COMPANY

Stocks Carried

NEW ORLEANS NEW YORK CHICAGO SAN FRANCISCO PHILADELPHIA

Generated on 2024-09-12 14:49 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

FULTON-DIESELS FOR ALL MARINE SERVICES



The four cylinder, Model L, Fulton Unit illustrated below is a full Diesel, four cycle, airless injection, marine engine. Built in sizes from 2 to 8 cylinders with a power range of 50 to 320 horsepower, speeds 400 to 720 R.P.M.

FULTON-DIESEL Engines for Marine Service are the result of 75 years of engine building experience—more than 20 years of which have been given over to the perfection of the Diesel.

Powerful, reliable and economical in operation—they are substantial, versatile, and sturdy. There is a Fulton-Diesel for every marine installation . . . Built in sizes from 2 to 10 cylinders, 50 to 2000 Horse Power, air or solid injection. They are especially suited as power units for tow boats, tugs, barges, inter-coastal freighters, pleasure craft, dredges and other similar installations.

FULTON IRON WORKS CO., ST. LOUIS, U. S. A.

Successful Engine Builders for Over Seventy-five Years

PLANTS at St. Louis and Springfield, Ohio

BRANCH OFFICES / New York / Chicago / Springfield, Ohio / New Orleans, La. / Tulsa, Okla. / Salt Lake City, Utah / Jacksonville, Fla. / El Paso, Dallas, Tex. / Monroe, La. / Wichita, Kan. / Mobile, Ala. and Havana, Cuba

FULTON DIESEL

Generated on 2024-09-12 14:18 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

U. S. Shipping Board converted Motor Ship "Courageous." Equipped with four 8 cylinder McIntosh and Seymour 4 cycle, single acting Diesel Engines, of 1200 H.P. each. These engines are directly connected with 4 generators which will supply current to a 4,000 H.P. General Electric Company Electric Drive Motor.

TEXACO URSA OIL

will lubricate the Diesel Engines and the Electric Drive Equipment

OF THE

M.S. COURAGEOUS

The M.S. Courageous is the first Diesel-Electric Drive Vessel to be built for the U. S. Shipping Board—and the world's largest.

This vessel, since its conversion by the Federal Shipbuilding Co., can maintain a speed of over 13 knots—or 3 knots faster than called for under her original design.

In developing and maintaining this greater speed, TEXACO URSA OIL will give a good account of itself.

In fact, TEXACO URSA OIL will give a good account of itself on *any* type or make of Diesel Engine.

Whatever your marine lubrication requirements, call on The Texas Company *First!*

We'll supply the lubricant that will put you first:—

1—In performance

2—In protection

3—In economy of operation

Stocks Kept at Ports throughout the World

THE TEXAS COMPANY

Texaco Petroleum Products

MARINE SALES DIVISION

Dept. LD, 17 Battery Place, New York City

OFFICES IN PRINCIPAL CITIES

Generated on 2024-09-12 14:48 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

THE facilities of the seven Todd Shipyards are immediately available to owners and operators at four points along the cost line of the United States.

In establishing a National Service, Todd yards and equipment with complete facilities are located at the most strategic points to serve those owners and operators of trans-Atlantic, trans-Pacific and coastal lines who need the experience and resources that are Todd's.

The same uniform Service is rendered at all yards.

TODD SHIPYARDS CORPORATION
25 Broadway, New York

Twenty-Two Floating Docks—Two Graving Docks—Twelve Shipways

Robins Dry Dock & Repair Co. *Erie Basin, Brooklyn, N. Y.*
Tietjen & Lang Dry Dock Co. *Hoboken, N. J.*
Todd Shipbuilding & Dry Dock Co., Inc., *Mobile, Ala.*
Todd Engineering Dry Dock & Repair Co., *New Orleans, La.*
Todd Dry Dock Engineering & Repair Corp., *Brooklyn, N. Y.*
Todd Dry Docks, Inc. *Harbor Island, Seattle, Wash.*
Todd Oil Burners, Ltd. *London, England*

TODD NEW YORK, U.S.A.

THE new Todd drydock under construction at its Robins plant, Erie Basin, Brooklyn, supplementing the other drydock service at this yard, will be the largest privately owned graving dock in and around New York Harbor.

When completed this drydock will accommodate, with few exceptions, the largest vessels in transatlantic service.

The building of this new graving dock is in line with this organization's policy to have facilities for service that are unsurpassed in the Port of New York.

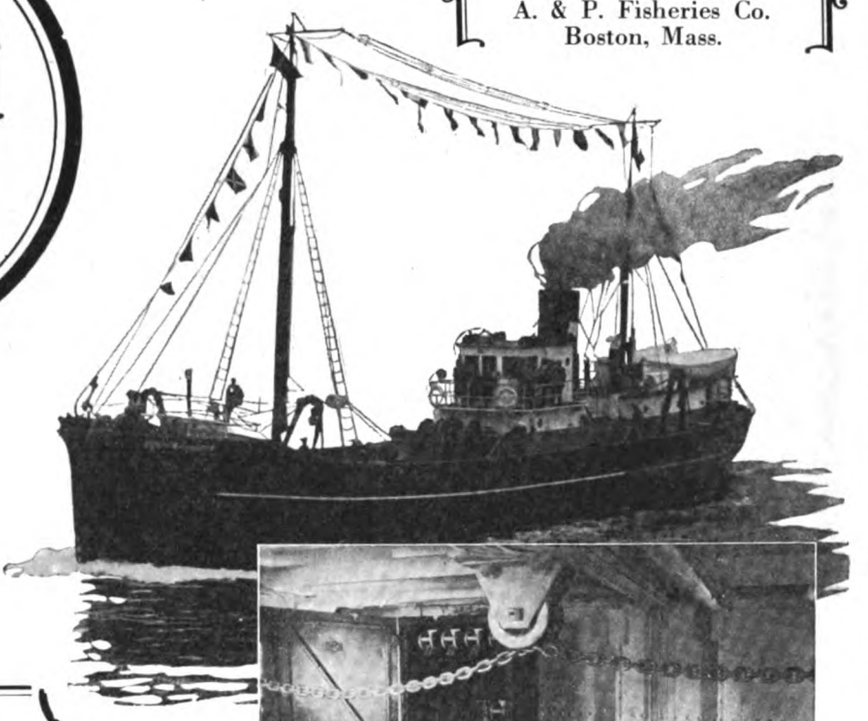
Generated on 2024-09-12 14:48 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Diehl

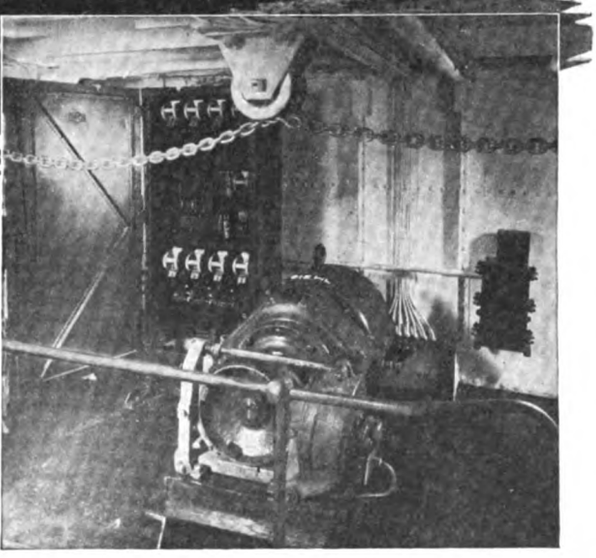
Diesel Trawler

BOSTON COLLEGE

A. & P. Fisheries Co.
Boston, Mass.



DIEHL Electrical Equipment, designed especially for fishing boats, is of unusually sturdy construction, with particular attention given to the quality and adequacy of insulation, enabling the equipment to withstand the exceptionally severe service to which fishing boats are subjected.



DIEHL TRAWL WINCH MOTOR
Equipped with Cutler-Hammer Watertight Brake, Master Controller and Contactor Panel.

The "BOSTON COLLEGE" is the first of three Diesel engine trawlers using Diehl electrical equipment ordered by the A. & P. Fisheries Company, Boston, Mass., from the Bath Iron Works, Bath, Maine.

The electrical equipment supplied by the Diehl Manufacturing Company includes:

Diehl Type TH, 75 H.P. heavy duty trawl winch motor, capable of delivering 150 H.P. for short periods.

Diehl Type L-16, 10 K.W. drip-proof ball bearing marine generator for connection to auxiliary Diesel engine for lighting, battery charging and pump motor operation.

Diehl small marine type motors.

Cutler-Hammer watertight 14" electric brake; master controller with bevel gear drive extended through bulkhead for operation from the forecastle; enclosed contactor panel for automatic trawl winch control; marine type grid resistance.

DIEHL MANUFACTURING COMPANY

ELECTRICAL DIVISION OF THE SINGER MANUFACTURING COMPANY
ELIZABETHPORT, N. J.
BOSTON OFFICE: 566 ATLANTIC AVENUE

Diehl Marine Electrical Equipment is sold by
BROMFIELD AUXILIARY MANUFACTURING COMPANY 31 Fish Pier, Boston, Mass.

Generated on 2024-09-12 14:20 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

What About The Boilers?

Trim and snug and lithe of line your ship may be. But what about dependable safety—what about the boilers?

Reading Charcoal Iron Boiler Tubes stand the severest tests of marine work. The natural slag element intermixed with the pure iron puts up a barrier against corrosion. Double welding and uniform thickness mean unvarying strength and long, long life.

For reliability that never wavers, specify Reading Charcoal Iron Boiler Tubes. They'll end your tube troubles.

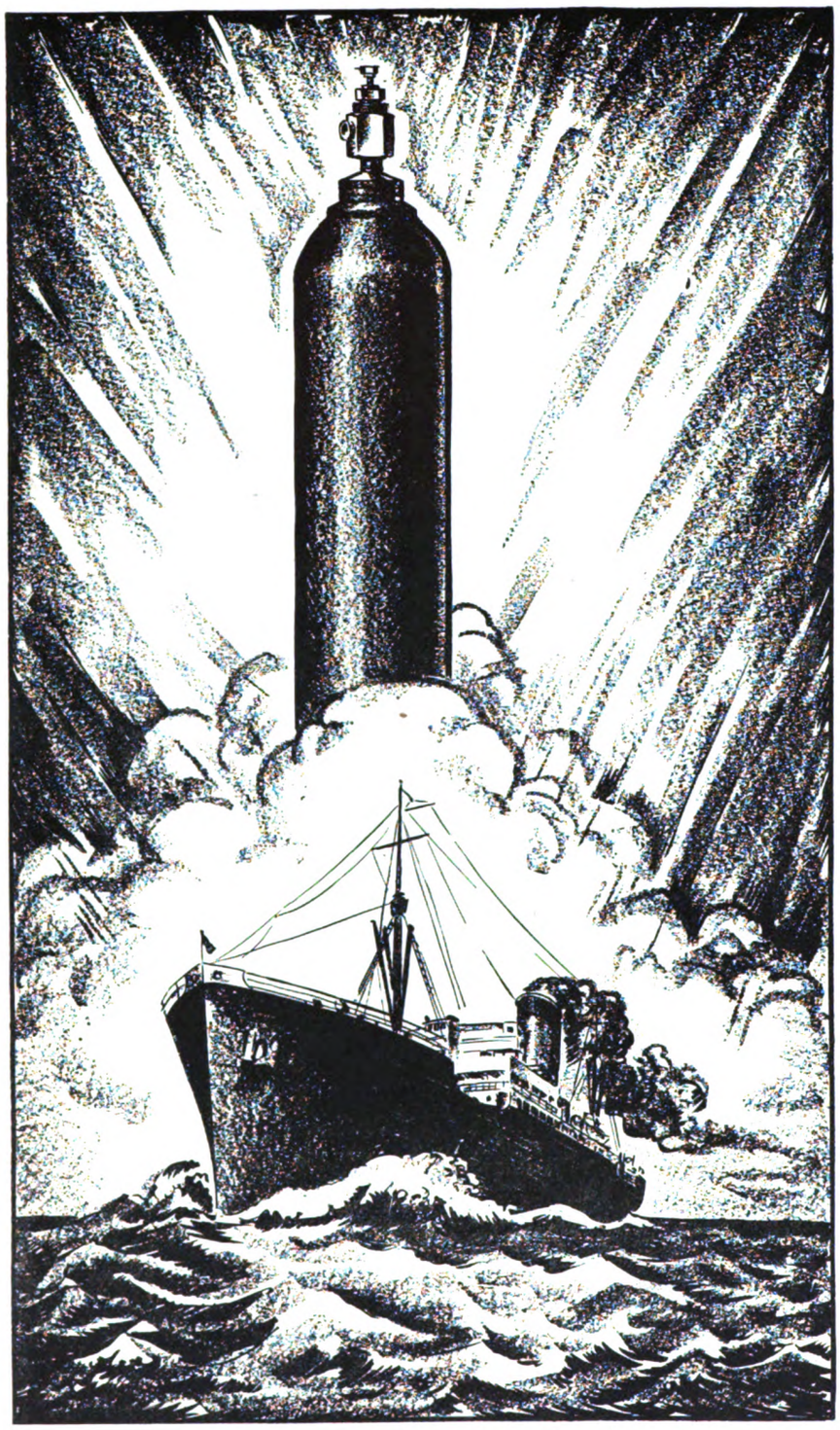
READING IRON CO. **READING, PA.**

Atlanta
Baltimore
Boston
Buffalo
Chicago
Cincinnati
Detroit
Houston
Los Angeles
New York
Pittsburgh
Cleveland
St. Louis
Tulsa
San Francisco
Fort Worth
Seattle
Philadelphia

READING

CHARCOAL IRON BOILER TUBES

Generated on 2024-09-12 14:21 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



ALFITE—the sure extinguishing system for cargo fires

You can't get close to a cargo fire. You have to fight it unseen.

But, flood the hold with ALFITE gas, and it won't make any difference whether you see what happens or not. The fire will go out. Fire cannot live in air that contains even fifteen percent of this gas.

The ALFITE System stores this gas in cylinders, that are connected with each hold through a fixed set of piping.

It is the simplest cargo fire extinguishing system known. It has fewer working parts—a manual and automatic release—a discharge valve so simple that refilling can be easily done—and with all its advantages it has removed the barrier of high cost.

If you are interested in obtaining full details write us, or call your nearest branch office. American-La France and Foamite Corporation, Engineers and Manufacturers, Dept I-10, Elmira, N.Y.

AMERICAN-LA FRANCE AND FOAMITE PROTECTION

A Complete Engineering Service

For Extinguishing Fires

Generated on 2024-09-12 14:57 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Not merely for Identification—! but for your protection!

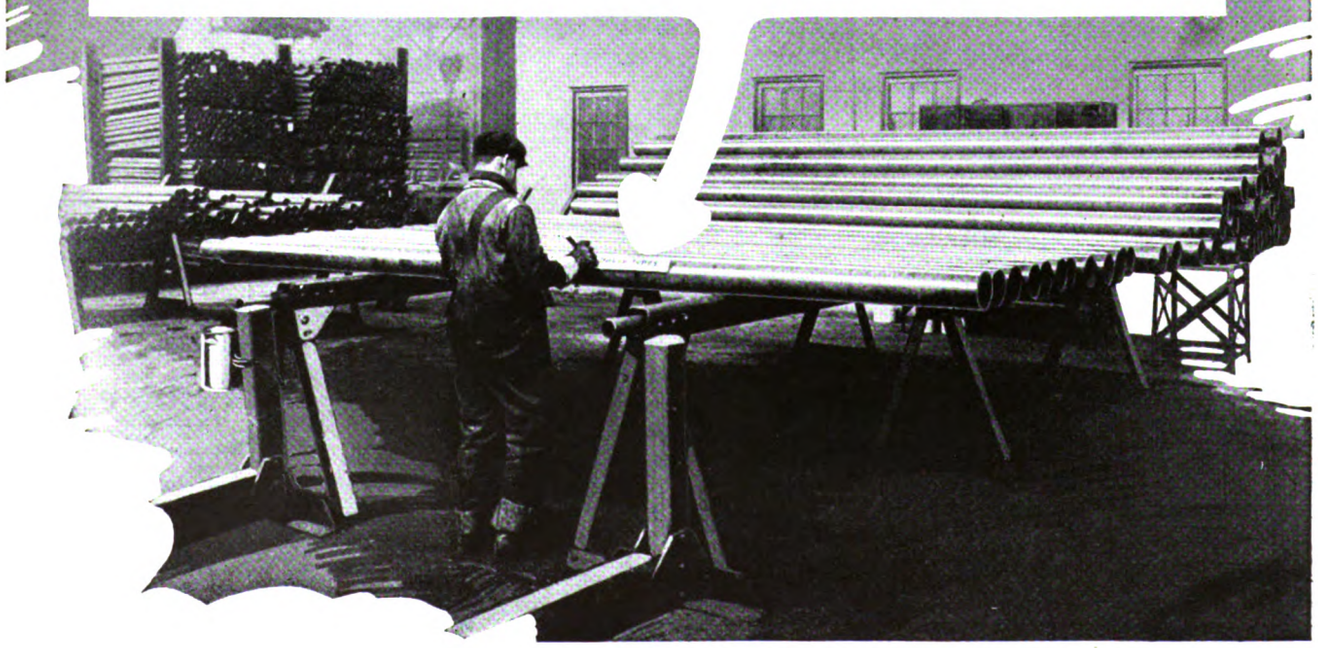
WHEN the mark "NATIONAL SEAMLESS BOILER TUBES" is placed on this product before it leaves the mill, it is more than just another step in the course of manufacture for the mere purpose of identification. It is the final O. K. or signature of this company—that these tubes have been given the most careful scrutiny before being released for service; that they have been manufactured under the control of one organization from raw material to finished product; that they have passed rigid tests for strength, ductility and durability; that they are uniform in chemical and physical properties and resistant to corrosion; that they are made of Open Hearth steel by the seamless process to meet the most rigid requirements of marine service

Thus, the mark "NATIONAL SEAMLESS BOILER TUBES" protects you against uncertainty and signifies as high a type of boiler tube quality as modern manufacturing methods, expert supervision and an intensive system of inspection and testing can produce. For those interested we will be glad to send our Bulletin No. 12, which will explain more fully the advantages of "NATIONAL-SHELBY" Seamless Boiler Tubes.

NATIONAL TUBE COMPANY, PITTSBURGH, PA.

District Sales Offices in The Larger Cities

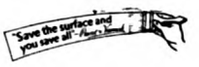
NATIONAL SEAMLESS BOILER TUBES



Generated on 2024-09-12 14:49 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

HOW LONG *will paint guard your metal?*

As long as it retains both continuity and adherence, paint gives complete protection. Specify the paint that keeps these qualities over a long period of years



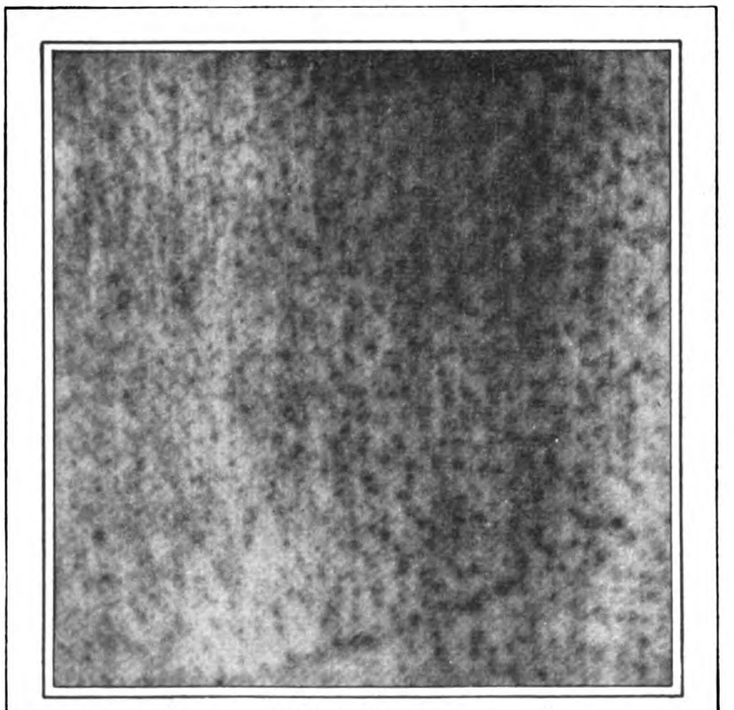
THREE years . . . five years . . . or longer? For how many years will the paint on your metal-work give complete protection?

One paint has proved, beyond question, its ability to retain continuity and adherence for years. Its name? *Red-lead.* It forms a tough, durable coating that remains intact throughout its remarkably long life.

Summer and winter, under all changes of temperature, it stays elastic . . . expands and contracts with the metal to which it is applied. No cracks or breaks develop . . . the red-lead paint-film *holds* its continuity.

And it does not loosen from the metal. So tightly does the red-lead paint-film stick to metal that the danger of scaling or peeling is never present when the paint is properly applied. Red-lead *retains* its adherence for years.

Thus it is that pure red-lead is recognized as the standard paint for metal. Thus it is that three coats of pure red-lead form a protective coating unexcelled for metal.



CONTINUITY FAILED

Tiny breaks developed in this paint-film . . . spot-rust started its destructive work. The paint did not retain its continuity

Paste and Liquid Red-Lead

Fine, uniform, highly oxidized—there is no better red-lead obtainable than Dutch Boy red-lead. It comes in two forms—paste and liquid. The liquid (ready for the brush) is supplied in six different colors—the natural orange-red, two shades each of green and brown, and black. The paste comes in the orange-red and can be shaded to dark colors.

Free paint service

Whenever you encounter an unusual painting problem, you will find our special technical staff ready to serve you. Their wide experience and exhaustive knowledge of painting enable them to give valuable assistance. Address the Department of Technical Paint Service, in care of our nearest branch office.

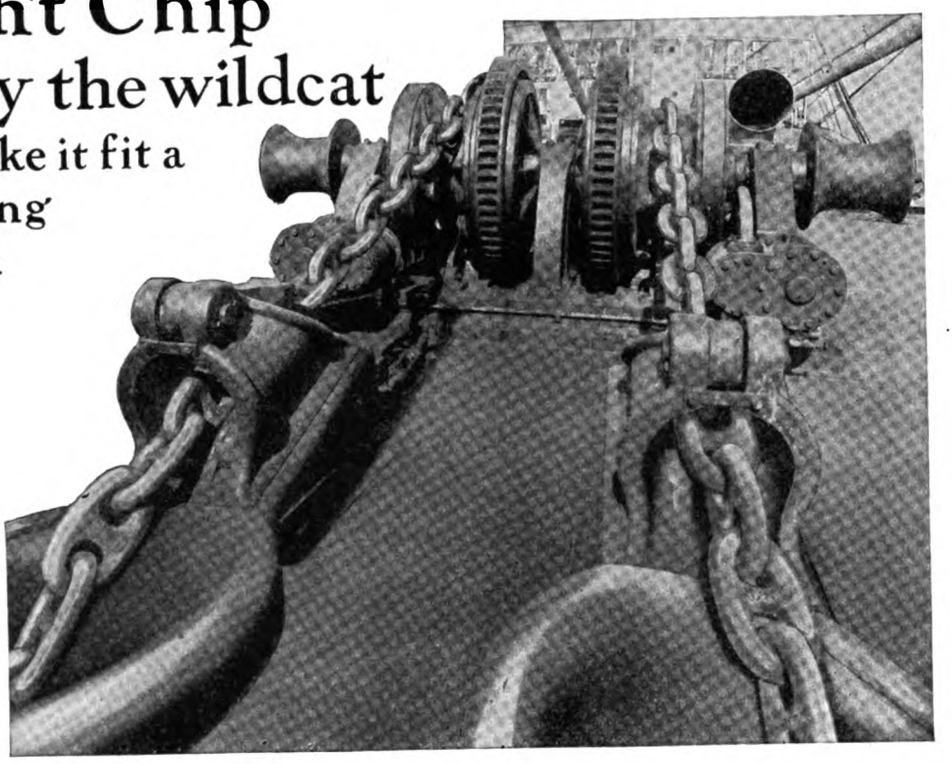
NATIONAL LEAD COMPANY

New York, 111 Broadway — Boston, 800 Albany St.
Buffalo, 116 Oak St. — Chicago, 900 West 18th St.
Cincinnati, 659 Freeman Ave. — Cleveland, 820 W. Superior Ave.
St. Louis, 722 Chestnut St. — San Francisco, 235 Montgomery St.
Pittsburgh, National Lead & Oil Co. of Pa., 316 Fourth Ave.
Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut St.

DUTCH BOY RED-LEAD

Generated on 2024-09-12 14:44 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Don't Chip away the wildcat to make it fit a varying chain



THE troublesome practice of chipping the wildcat, to fit the varying links of the anchor chain, is no longer necessary.

Naco Anchor Chain links do not vary:

They are absolutely uniform in size, shape, and wire diameter, and run evenly and smoothly over the windlass.

Specify "NACO" and eliminate your anchor chain troubles

NATIONAL MALLEABLE AND STEEL CASTINGS CO.

General Office — Cleveland, O.

Generated on 2024-09-12 14:20 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

THE SIGNIFICANCE TO *YOU* OF THE MEMBERSHIP OF

Marine Engineering and Shipping Age

IN THE ASSOCIATED BUSINESS PAPERS, INC.

YOU depend upon Marine Engineering and Shipping Age for an unbiased and accurate report of all news affecting your business interests.

Probably, too, you give heed to its editorial counsel in many matters of considerable consequence. You have a right, therefore, to know about the policies and principles back of the important service rendered by Marine Engineering and Shipping Age.

The membership of this publication in The Associated Business Papers, Inc., means that it has achieved an exceptionally high publishing standard, and has subscribed unreservedly to these—

STANDARDS OF PRACTICE

The publisher of a business paper should dedicate his best efforts to the cause of Business and Social Service, and to this end should pledge himself—

1. To consider, first, the interests of the subscriber.
2. To subscribe to and work for truth and honesty in all departments.
3. To eliminate, in so far as possible, his personal opinions from his news columns, but to be a leader of thought in his editorial columns, and to make his criticisms constructive.
4. To refuse to publish "puffs," free reading notices or paid "write-ups"; to keep his reading columns independent of advertising considerations, and to measure all news by this standard: "Is it real news?"
5. To decline any advertisement which has a tendency to mislead or which does not conform to business integrity.
6. To solicit subscriptions and advertising solely upon the merits of the publication.
7. To supply advertisers with full information regarding character and extent of circulation, including detailed circulation statements, subject to proper and authentic verification.
8. To co-operate with all organizations and individuals engaged in creative advertising work.
9. To avoid unfair competition.
10. To determine what is the highest and largest function of the field which he serves, and then to strive in every legitimate way to promote that function.

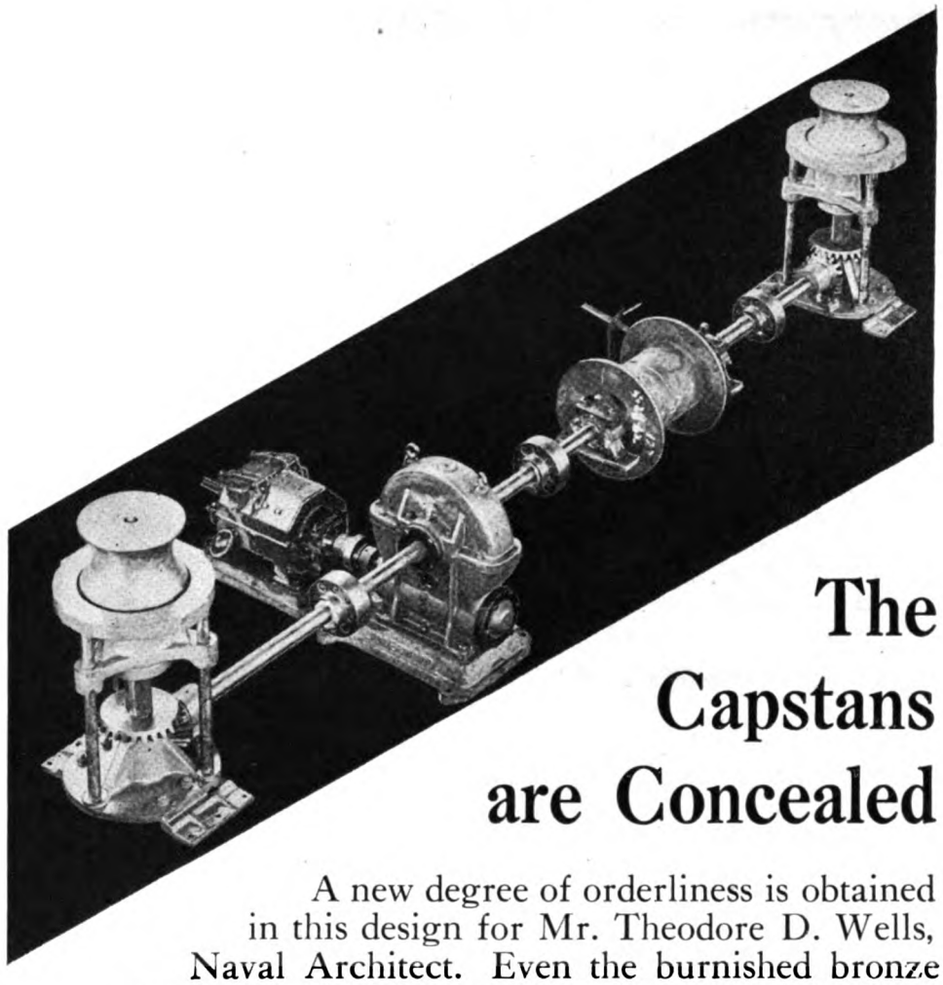
If you have read the foregoing standards, there is not much left to be said, except to tell you that these principles are *present day realities* and not merely beautiful ideals for future attainment.

THE ASSOCIATED BUSINESS PAPERS, INC.

The International Association of Trade, Technical and Class Publications

52 VANDERBILT AVENUE NEW YORK CITY

Generated on 2024-09-12 15:01 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



The Capstans are Concealed

A new degree of orderliness is obtained in this design for Mr. Theodore D. Wells, Naval Architect. Even the burnished bronze capstan heads disappear beneath special deck plates.

Below deck, the stern anchor rope drum—clutch operated, ratchet and pawl locked—will handle a 900 pound stern anchor and its 400 feet of 7/8" wire rope.

The *authority of experience* is evidenced in Lidgerwood design—in the standard winches and in the special equipment to suit out-of-the-ordinary construction.

Lidgerwood Manufacturing Company

ELIZABETH, NEW JERSEY

Sales Agents
Baltimore..Henry H. Meyer Company
Norfolk.....Tidewater Supply Co.
Atlanta..R. S. Armstrong & Bro. Co.
New Orleans..Woodward, Wight & Co.

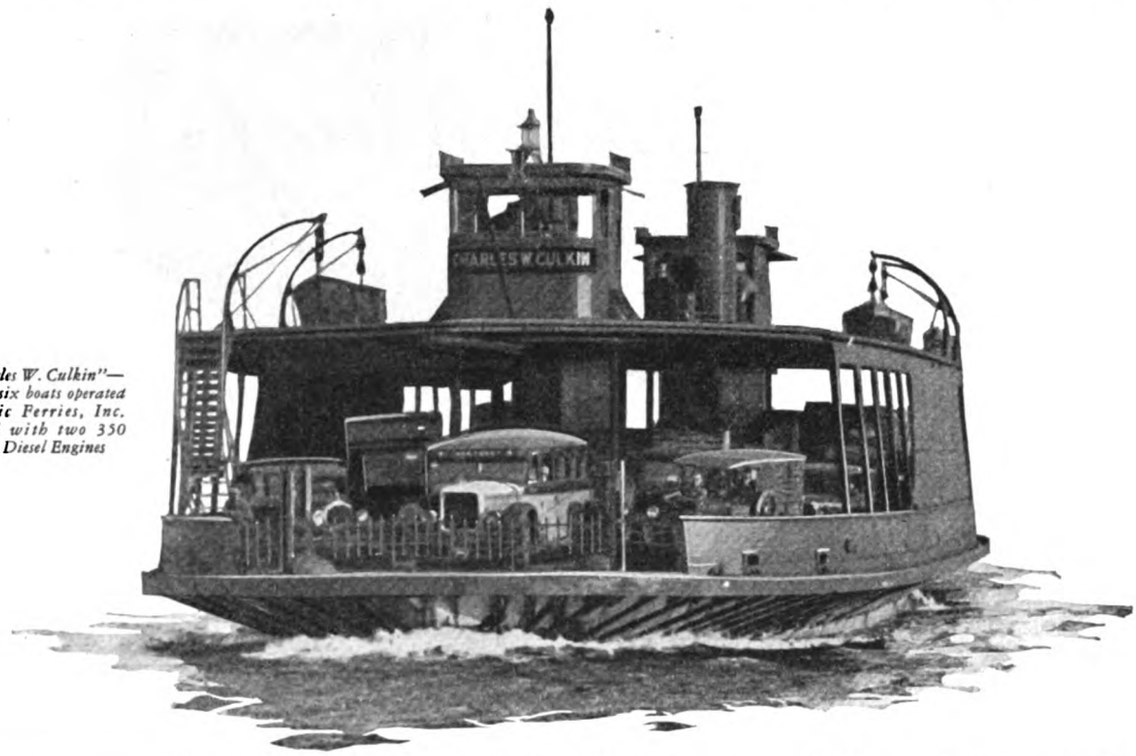
New York Philadelphia Chicago Boston
Lidgerwood Pacific Company, Seattle, Portland, Tacoma,

Sales Agents
Detroit.....J. W. Dopp & Co.
San Francisco...R. S. Smith & Co.
Los Angeles.....Garlinghouse Bros.
Montreal....William Hamilton, Ltd.

LIDGERWOOD ELECTRIC WINCHES

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

"Do not believe any other engines could have given the satisfaction Nelseco's have"—J. E. PRICE



The "Charles W. Culkin"—one of the six boats operated by Electric Ferries, Inc. Equipped with two 350 B.H. P. Diesel Engines

J. E. Price, Marine Superintendent of Electric Ferries, Inc.

Is it any wonder that J. E. Price, Marine Superintendent of Electric Ferries, Inc., says of the 12 Nelseco Diesel engines installed in the 6 boats of his line—"I do not believe that any other engines in the world could have given the satisfaction that Nelseco's have."

The boats of Electric Ferries, Inc., average 18 trips an hour between New York and Weehawken, N. J., and return.

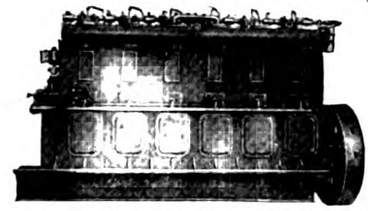
They carry an average of 3500 motor vehicles a day.

In 2 years they have never missed a trip on account of engine trouble.

In this time their engines have required only the most minor replacements.

Mr. Price has had 12-years of experience with many makes of Diesel engines. He prefers Nelseco Diesels to any others—because of their reliability, their accessibility and the fact that they require no expensive overhauling. In the two years that Electric Ferries, Inc., has been in operation there has been no necessity for replacing either bearings, pistons, or cylinder heads . . . and the actual cost for minor replacements over the two-year period since November 8, 1926, for 12 engines in 6 boats has been only $355.30.

No evidence of Nelseco superiority could be more convincing than their use by a ferry line whose growth and development depends upon the reliability of the service it offers.



Nelseco Diesel Engine, Type 6 MI-18, 350 B.H.P. at 280 R.P.M. 6 cylinder, mechanical injection

For full information on Nelseco Diesel engines, write for Catalog M. E.

NELSECO

Original licensees from and collaborators with M. A. N. since 1910

NEW LONDON SHIP AND ENGINE COMPANY

Groton, Conn., U. S. A.

New York Sales Office: **247 Park Avenue, New York City**

Chicago Representative
H. JACOBSEN
25 North Dearborn Street

Boston Representative
C. J. O'NEILL
10 High Street, Boston, Mass.

West Coast Representative
KING-KNIGHT CO.
Seattle, San Francisco, Los Angeles

Generated on 2024-09-12 14:23 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

CUTLESS RUBBER BEARINGS

. . . after 115,200 Miles show *Negligible Wear!*

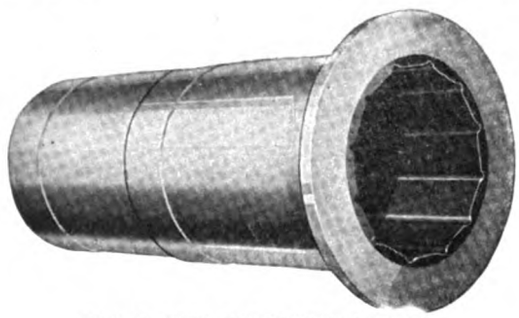
C. C. BROWN, Port Captain of the Golden Gate Ferry Company, San Francisco, California, writes in a letter dated August 9, 1928:

"These bearings were installed in the Motor Ferry 'Golden State' at the time of construction of that vessel, have been in continuous operation since the vessel went into service on July 2, 1926, and have not yet been renewed; and this against the fact that Lignum Vitae bearings would have required renewal every eight months of operation.

"This vessel has been the twenty-four hour boat during most of its operation, and as such has run approximately 115,200 miles."

THE B. F. GOODRICH RUBBER CO.
Established 1870 Akron, Ohio

Cutless Rubber Bearings outwear bearings of all other types, and eliminate vibration and shaft scoring.



For best results, shafting or shaft sleeves of bronze or Monel metal are recommended.

DISTRIBUTORS:

Metropolitan District
Topping Brothers
159 Varick Street
New York City

Freeport, L. I., N. Y.
The Columbian Bronze Corp.

Los Angeles, Calif.
Pacific Goodrich Rubber Co.
1386 E. 7th Street

Washington, D. C.
R. L. Fryer, *Special Rep.*
B. F. Goodrich Rubber Co.
Cutless Bearing Division
430 Transportation Bldg.

Chicago, Ill.
K. M. Walker & Co.
327 La Salle St.

Philadelphia, Pa.
Marine Equipment & Supply Co.
116 Walnut Street

San Francisco, Calif.
Pacific Goodrich Rubber Co.
650 Second Street
Ford & Geirrine
Balfour Building

Galveston, Texas
The Steamship Supply Co.
2119 Strand

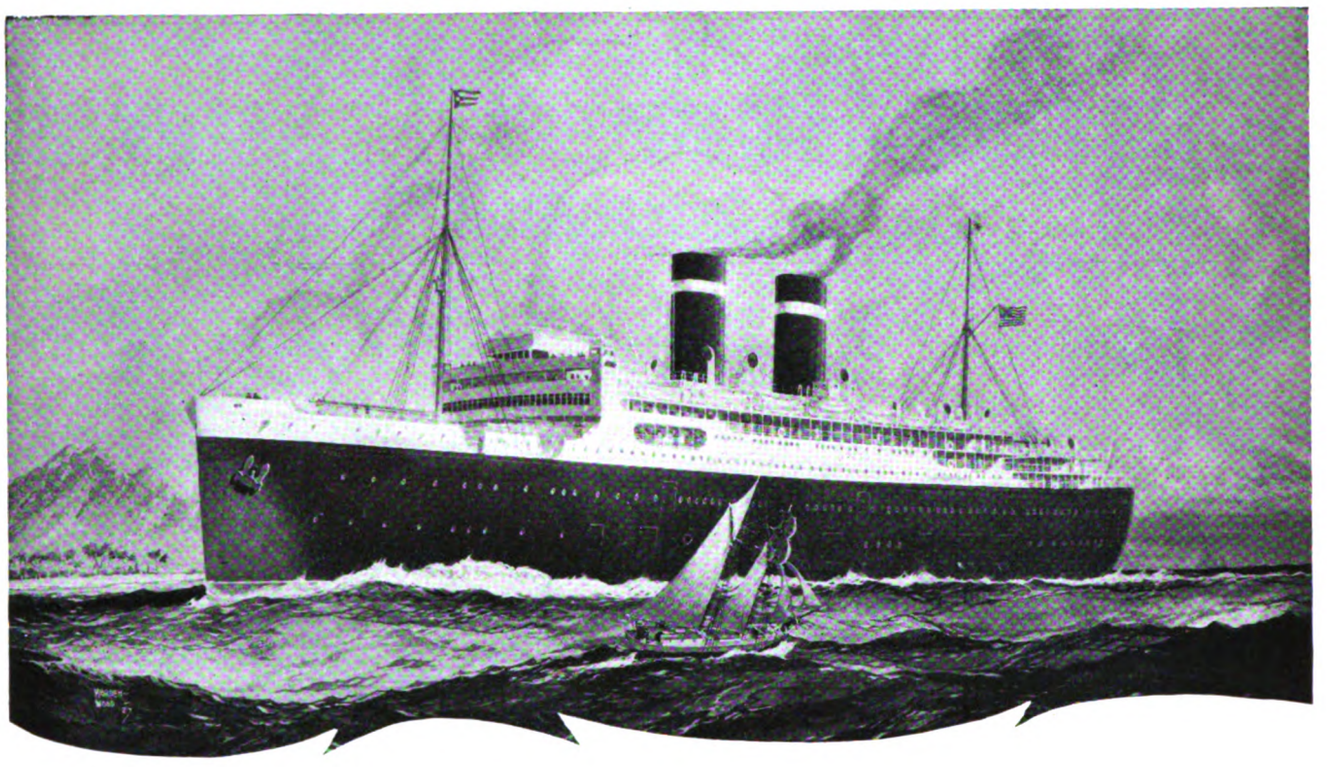
Harrisburg, Texas
Peden Iron & Steel Co.

Seattle, Washington
Pacific Goodrich Rubber Co.
115 King Street

Lancashire, England
British Goodrich Rubber Co., Ltd., Leyland

France
Societe Francaise B. F. Goodrich, Colombes (Seine)

Generated on 2024-09-12 14:18 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



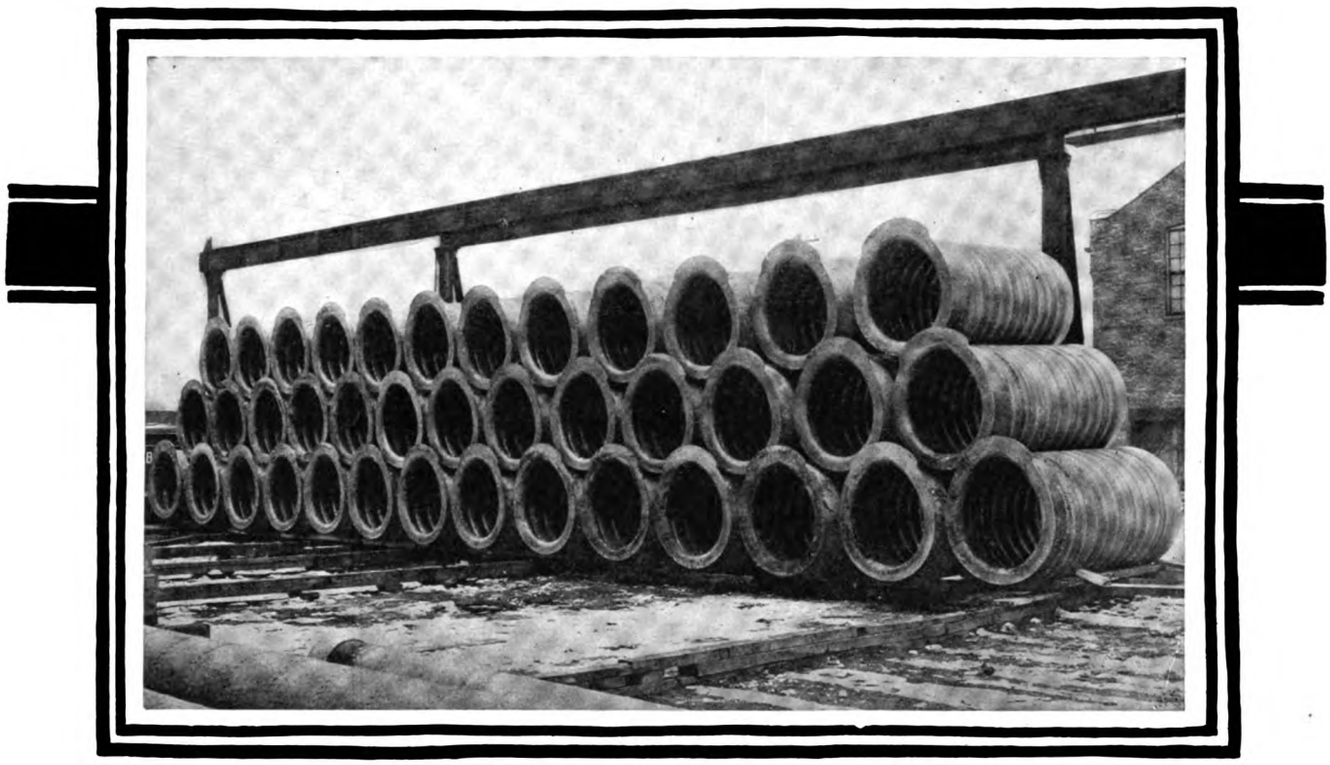
On The Virginia
Joiner Hardware Furnished by Getty

The S. S. Virginia is the second of three great ships ordered by the International Mercantile Marine. It is a tribute to the high quality of Getty hardware that it was selected for all of these ships.

H. S. GETTY & CO., Inc.
3348 N. Tenth St., Philadelphia, Pa.

MANUFACTURERS OF QUALITY MARINE HARDWARE

Generated on 2024-09-12 15:02 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



Corrugated Marine Furnaces

A full range of sizes

The largest plant capacity in America with more than a thousand tons of firebox furnace plates in stock enables us to meet your demands for quick delivery. Continuous production for many years gives assurance of superior quality.

All styles and sizes can be quickly supplied to meet exacting requirements and to conform to the specifications of all official inspection bureaus. Shipments can be laid down on the Atlantic coast within five days after they leave our plant.

Your Request Will Bring Our Catalogue

Taylor Forge Division
American Spiral Pipe Works

for 20 years the largest manufacturers of forged steel flanges

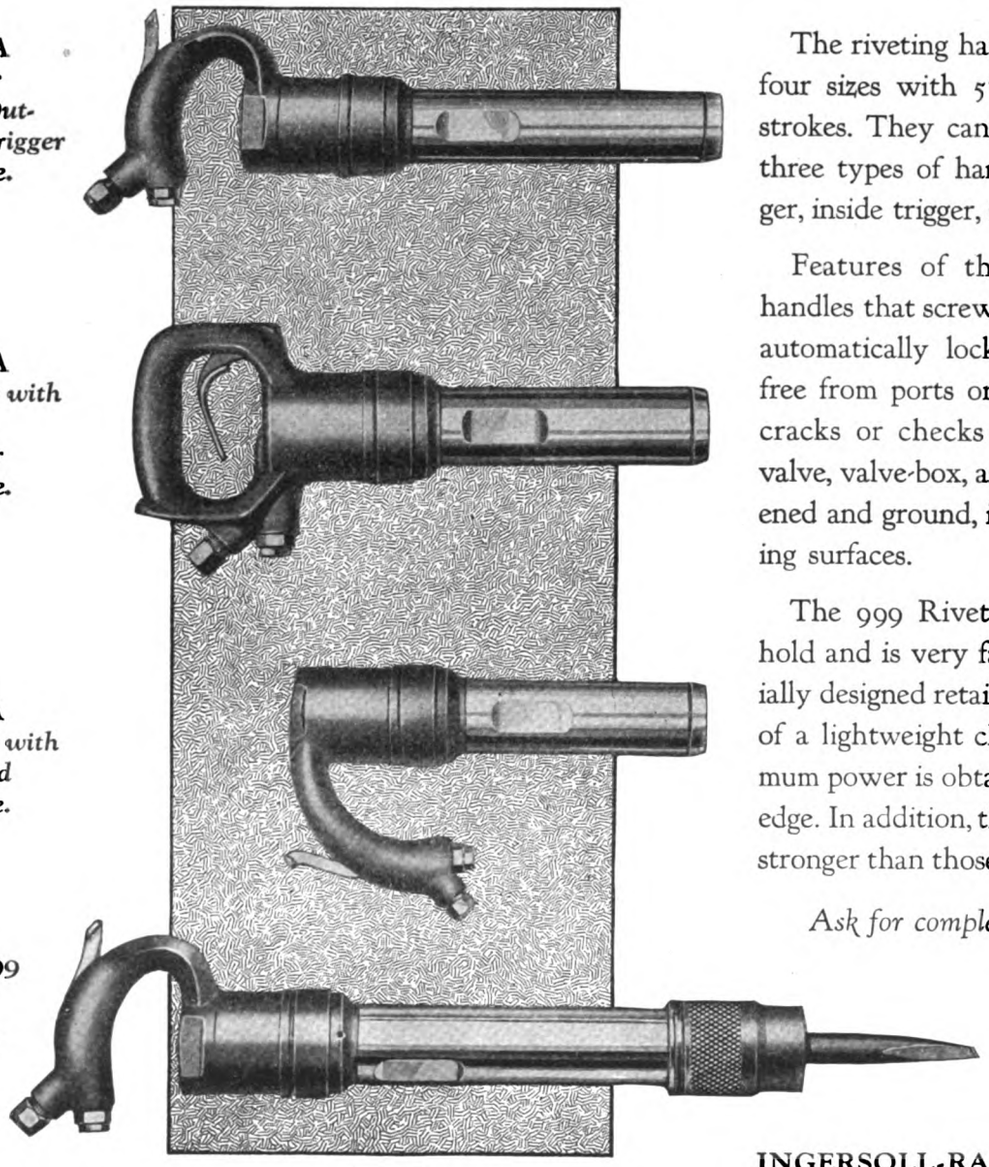
Main Office and Works:
Chicago, Illinois, P. O. Box 485

New York Office
50 Church Street
M E & S A 12-Gray

Generated on 2024-09-12 15:01 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

New Riveters and Rivet Buster

that hold better, drive better, and have a more rugged design



Size 8A Riveter with Outside Trigger Handle.

Size 6A Riveter with Inside Trigger Handle.

Size 5A Riveter with Inverted Handle.

Size 999 Rivet Buster.

The riveting hammers are made in four sizes with 5″, 6″, 8″, and 9″ strokes. They can be furnished with three types of handles—outside trigger, inside trigger, or inverted handle.

Features of these hammers are: handles that screw on the barrels and automatically lock tight, and valves free from ports or holes from which cracks or checks might start. The valve, valve-box, and barrel are hardened and ground, insuring long wearing surfaces.

The 999 Rivet Buster is easy to hold and is very fast cutting. A specially designed retainer permits the use of a lightweight chisel, so that maximum power is obtained on the cutting edge. In addition, the chisels are much stronger than those of older design.

Ask for complete information

INGERSOLL-RAND COMPANY
11 Broadway - New York City
Offices in principal cities the world over
For Canada Refer: Canadian Ingersoll-Rand Co., Limited
10 Phillips Square, Montreal, Quebec

"Riveting is Safe and Permanent"

Ingersoll-Rand

419-PT

Generated on 2024-09-12 14:20 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Save a Third on a Complete Diesel Book

Was $7.50—Now $5.00

"Practical Marine Diesel Engineering"

LOUIS R. FORD

The author combines practical sea experience both as a steam and as a Diesel engineer, with a thorough technical knowledge of the newest developments in Diesel engineering.

525 pages, 264 illustrations, 6 x 9 inches, heavy cloth binding.

By L. R. FORD

Marine engineers sooner or later are called upon to operate a Diesel. You can obtain a practical knowledge of how to keep Diesel engines in top-notch condition, of how the practical Diesel engineer goes about the work of operating and repair. You can find everything you need to know about the operating end of Diesels in this practical book.

Louis R. Ford knows Diesel engines. He has an established reputation as an authority. In his book he gives you the benefit of his own broad experience.

He tells you how to go about getting a Motorship Engineer's License. The rules of the Board of Supervisors and Inspectors are clearly explained. To test your general knowledge of the subject he asks a series of practical questions—and then furnishes the right answers. This is the book you need to prepare for an engineer's examination, or to take charge of a marine Diesel engine.

In a plain, non-technical manner this book covers Construction, Maintenance, Operation and Repair of Diesel Engines

"This book should be of service to every marine engineer afloat or ashore," says the Pacific Marine Review. "It is the only book we have seen which deals directly and simply with Marine Diesel operating problems."

Mail This 10-Day Examination Coupon Today

It will cost you nothing to prove to yourself that this book is of practical value. Mail the attached coupon—send no money—examine the book for 10 days—free. You will no doubt find it worth $7.50 and a bargain at $5.00 but, if for any reason you prefer not to keep it, you may return it.

Simmons-Boardman Publishing Company

"The House of Transportation"

30 Church St. New York

SIMMONS-BOARDMAN

FREE EXAMINATION COUPON

Simmons-Boardman Publishing Company,
Book Department,
30 Church Street, New York, N. Y.

Please send me, for 10 days' free examination, a copy of "Practical Marine Diesel Engineering." I will either remit $5.00 within ten days or return the book in good condition.

NAME .....

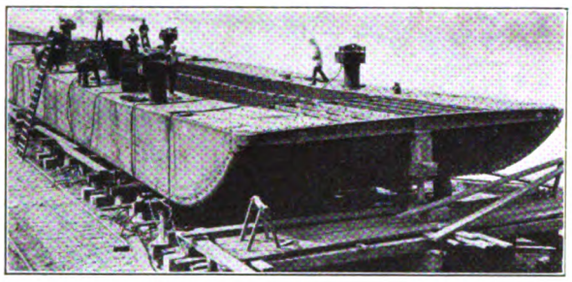
ADDRESS .....

CITY .....STATE .....

POSITION .....COMPANY .....

Postage prepaid and books sent on approval to retail purchasers in U. S. and Canada only S.A.12-28

Generated on 2024-09-12 14:20 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



Progress Picture Showing Steel Barges Constructed for the Mississippi River Commission

Barge Department

of

AMERICAN BRIDGE COMPANY

Builders of

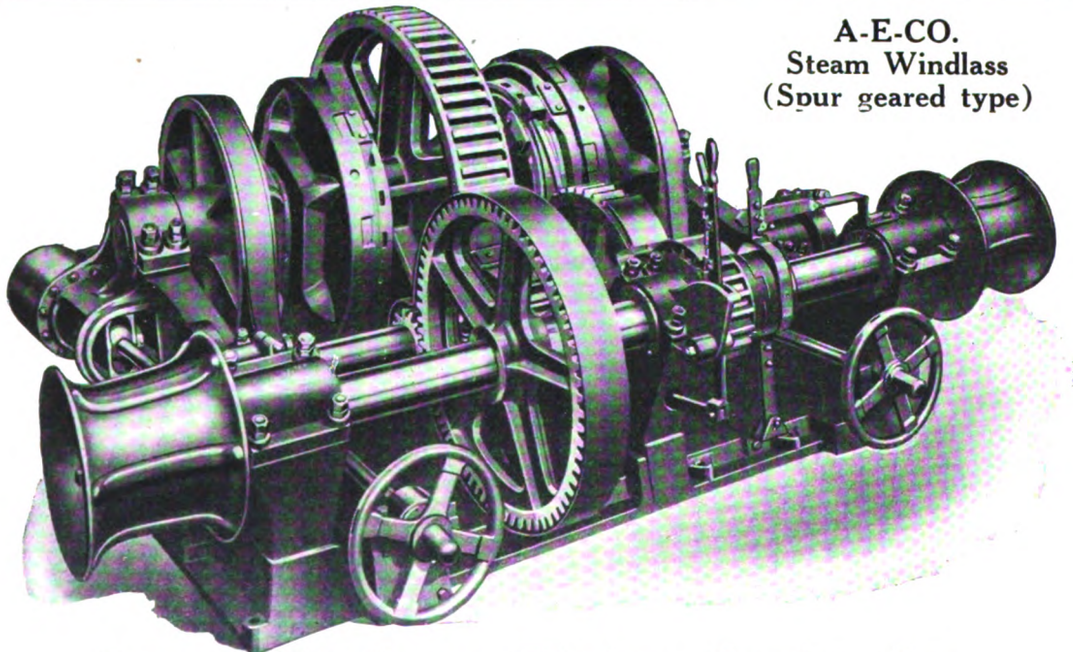
STEEL BARGES

FOR RIVERS AND HARBORS

AMERICAN BRIDGE COMPANY

Offices in Principal Cities

Frick Building **Pittsburgh, Penna.**



A-E-CO.
Steam Windlass
(Spur geared type)

Steerers, Windlasses, Winches, Gypsies, Capstans, Towing Machines—Any Size—Any Type

WRITE FOR INFORMATION

American Engineering Company

Aramingo and Cumberland Sts. **Philadelphia, Pa.**

Generated on 2024-09-12 14:20 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

MORISON
Suspension Furnaces
For Scotch Marine Boilers

Made to United States, American Bureau of Shipping, Lloyd's, Bureau Veritas, or any other requirements.

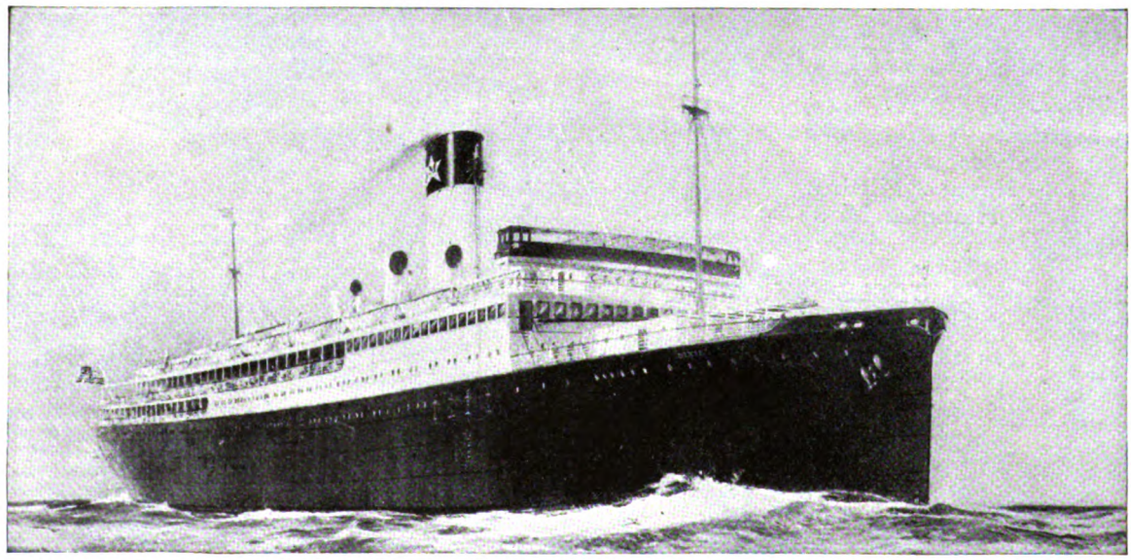
A useful folder, giving working pressures for various sizes of furnaces, will be mailed on request.

ROWLAND PROCESS FORGE WELDED
EVERLASTINGLY TIGHT

Formerly made by the Continental Iron Works (established 1859). The old standard of high quality, known throughout the world, is being maintained. Men of long practical experience are in charge, and deliveries can be made very promptly.

THE AMERICAN WELDING COMPANY
30 Church St., New York - - - - - - - - - Telephone, Cortland 8110
WORKS, CARBONDALE, PENNSYLVANIA

THE BABCOCK & WILCOX CO.
Manufacturers of Marine Water Tube Boilers Since 1895



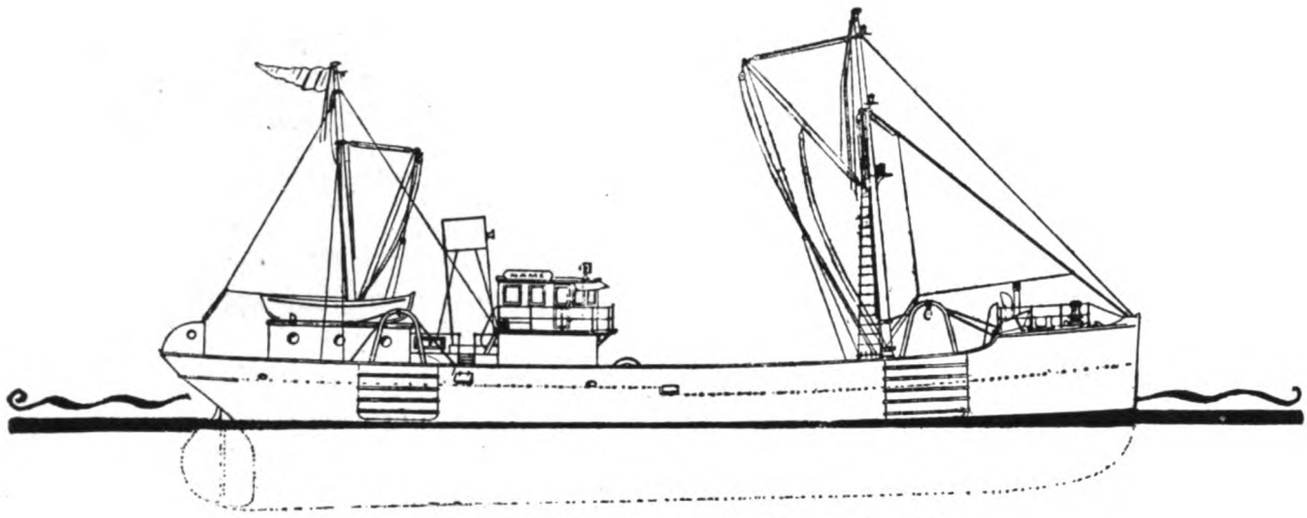
STEAMSHIP "DIXIE", SOUTHERN PACIFIC STEAMSHIP LINES
Equipped with Babcock & Wilcox Water Tube Boilers, Superheaters, Mechanical Atomizing Oil Burners and Feed Water Regulators.
Boiler Pressure, 350 Pounds. Superheat, 200 Degrees.

MARINE DEPARTMENT

Sheldon Building, SAN FRANCISCO | 85 Liberty St., NEW YORK | Guardian Building, CLEVELAND

Generated on 2024-09-12 14:20 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

"Bath will always build good ships"



Outboard profile of three trawlers now under construction by

BATH IRON WORKS CORP.

Shipbuilders and Engineers

Bath **Maine**

Announcing The New Cleco Chipper

The— Lightest Fastest and Hardest Hitting Hammer Made—

The Hammer That Pleases Everybody

Style "L"

STYLE A.K. CLECO CHIPPER

Is the same in its construction as the Style"L" shown above, differing only in the Handle Locking device which is a "Ratchet" Lock instead of a Clamp-Bolt and Nut. Either style hammer furnished on order from stock.

THE NEW CLECO CHIPPER

Is a "High Speed" Hammer designed for high speed production demanded in present day methods of manufacture.

The Cleco has no "Vibration" in operation; it is Easy to hold and Easy to control.

Piece-workers prefer the Cleco, as it shows a gain of 33 1-3% in Output.

The Cleco is a "Rugged" tool. Low in "Upkeep" and "High" in Quality and Performance.

A free trial is offered to interested users — No obligation incurred.

Illustrated Bulletin No. 727 mailed on request

THE CLEVELAND PNEUMATIC TOOL CO.

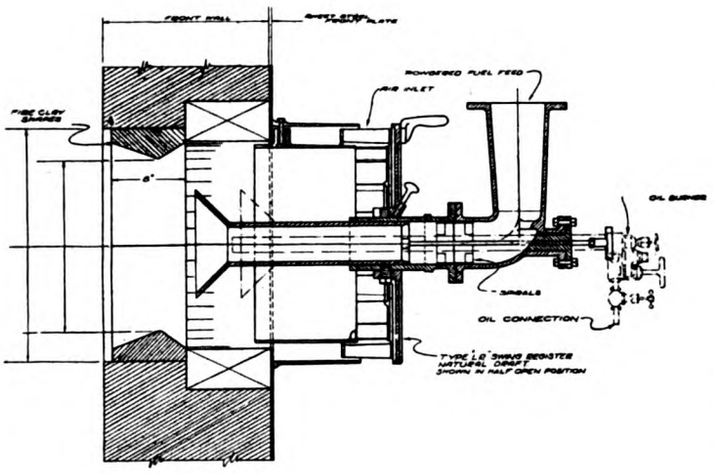
3734 EAST 78th STREET, CLEVELAND, OHIO, U. S. A.

Agts. for British Isles, John MacDonald & Co. (Pneumatic Tools), Ltd., Glasgow, Scotland

Generated on 2024-09-12 14:18 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

COEN Combination Burner

for Powdered Fuel and Oil



THE COEN Combination Burner of the low velocity turbulent type marks a big advance in burning oil and powdered coal. Either of these fuels may be burned with high efficiency and remarkable economy.

Stratification is completely broken up. The front has a liberating capacity of approximately 20,000,000 B.T.U.'s per hour, assuring ample capacity for any requirements.

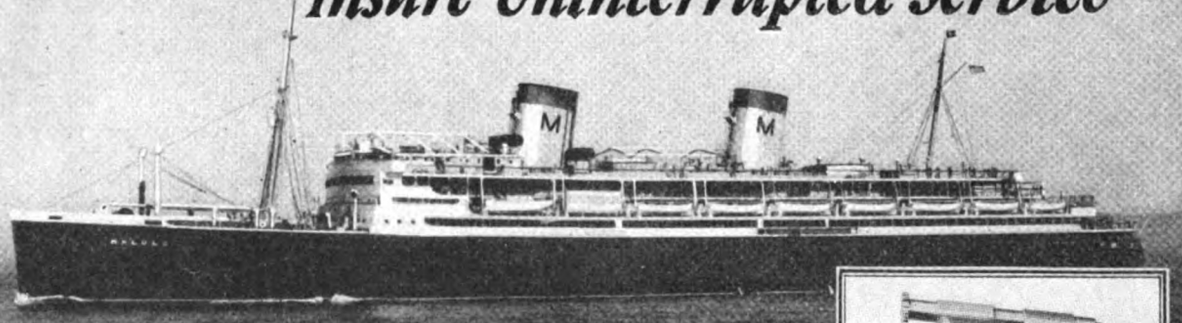
An investigation of this remarkable burner will show you the way to maximum steam per fuel dollar. Write for complete information and engineering data.

COEN COMPANY, INC.

50 Church St., New York, N. Y. Executive Offices 112 Market St., San Francisco 428 Story Bldg., Los Angeles

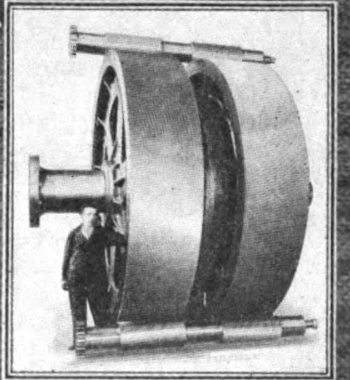
De Laval Marine Gears

Insure Uninterrupted Service



The Munson liner MALOLO, shown above leaving San Francisco Harbor through the Golden Gate, recently completed 12 months service or 26 round trips to Hawaii, aggregating 110,000 miles at an average speed of approximately 21 knots in all weathers. The regularity of her schedule demonstrates the reliability of her propelling equipment, which includes four De Laval two pinion, single reduction gears transmitting a total of 25,000 hp. These gears have a pitch diameter of 141 ins. and a total width of working face of 57 ins.

De Laval propelling equipment insures lowest cost and greatest reliability. Ask our engineers for recommendations and guarantees on De Laval turbines and gears for that vessel which you are planning.

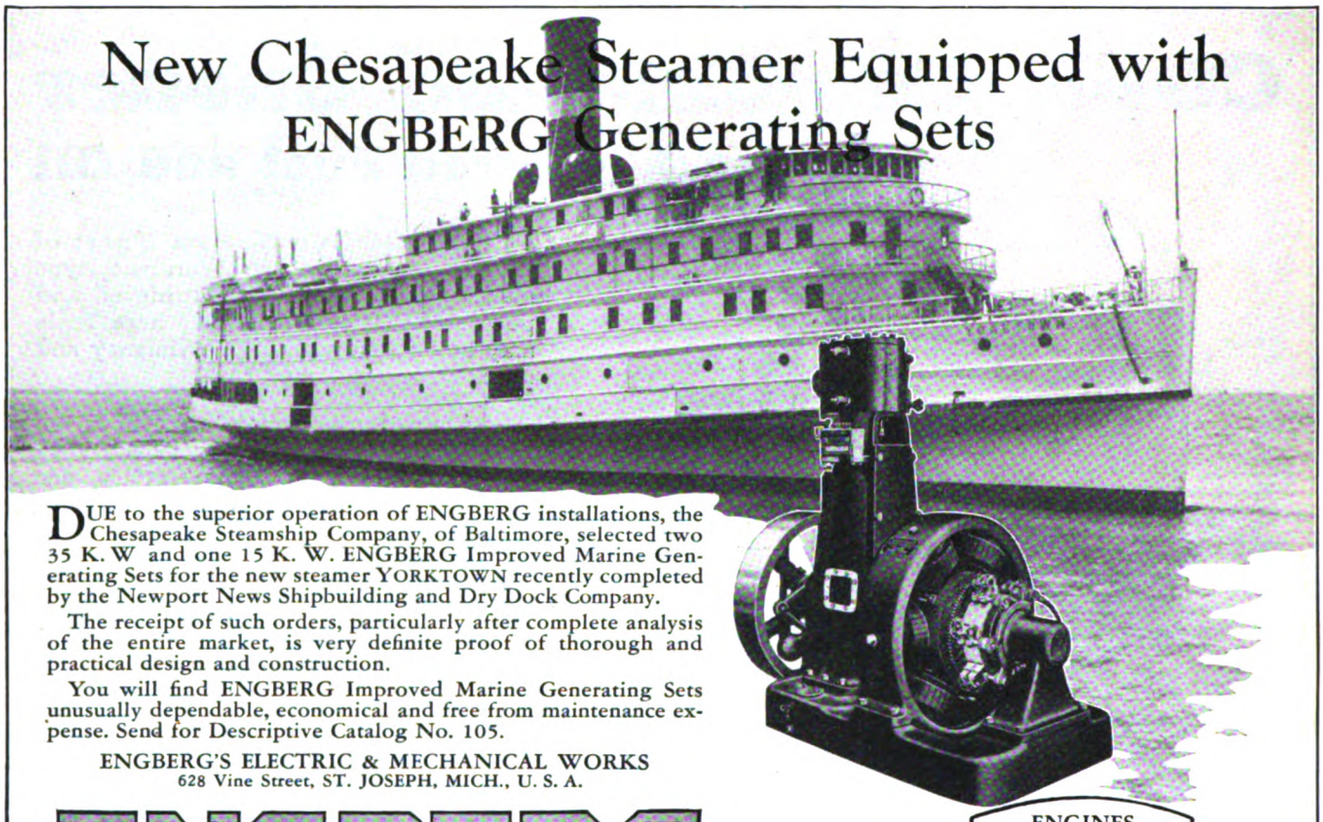


DeLaval Steam Turbine Co., Trenton, N.J.

2283-8 PHOTO COURTESY MATSON LINE AD-2032

Generated on 2024-09-12 14:55 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

New Chesapeake Steamer Equipped with ENGBERG Generating Sets



DUE to the superior operation of ENGBERG installations, the Chesapeake Steamship Company, of Baltimore, selected two 35 K. W and one 15 K. W. ENGBERG Improved Marine Generating Sets for the new steamer YORKTOWN recently completed by the Newport News Shipbuilding and Dry Dock Company.

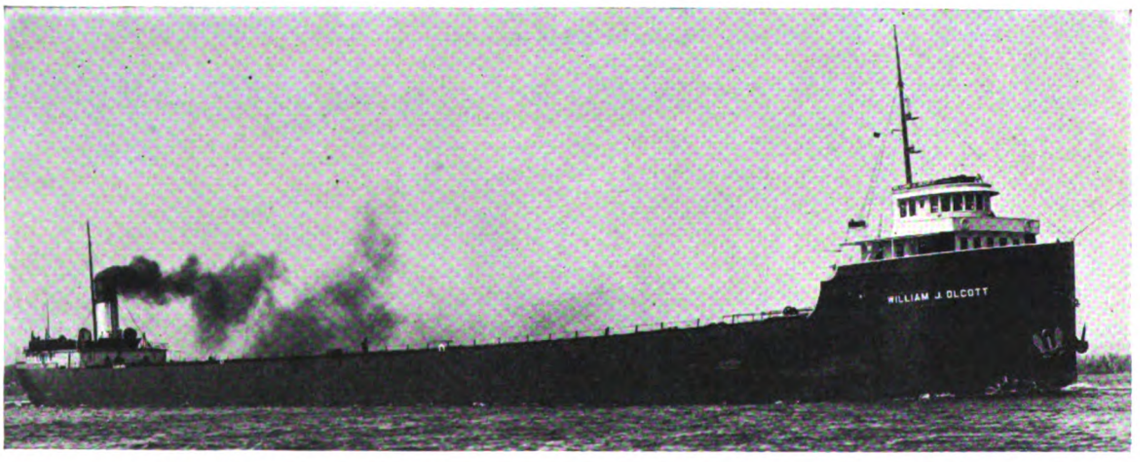
The receipt of such orders, particularly after complete analysis of the entire market, is very definite proof of thorough and practical design and construction.

You will find ENGBERG Improved Marine Generating Sets unusually dependable, economical and free from maintenance expense. Send for Descriptive Catalog No. 105.

ENGBERG'S ELECTRIC & MECHANICAL WORKS
628 Vine Street, ST. JOSEPH, MICH., U. S. A.

ENGBERG
GUARANTEED OPERATION

ENGINES
GENERATING SETS
GENERATORS
SWITCHBOARDS
MOTOR GENERATORS
MOTORS



11,000 ton ore vessel, "William J. Olcott" in which Foster Wheeler equipment is installed

Foster Wheeler Marine Installations

Foster Wheeler marine equipment is installed in steamers operating on the inland waterways of the country, as well as on steamships the world over. The equipment is essentially efficient and reliable; years of operation prove its durability.

Foster Wheeler marine equipment includes superheaters, economizers, surface and jet condensers, evaporators, vacuum pumps and feed water heaters.

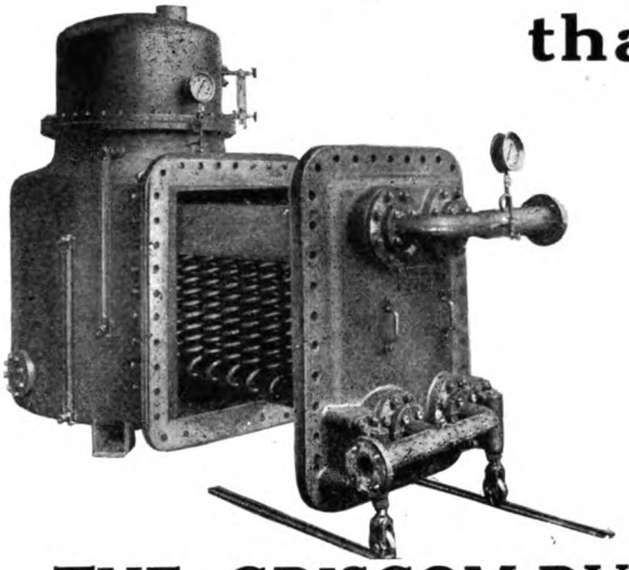
FOSTER WHEELER CORPORATION

165 Broadway, New York, N. Y.

Representation in Principal Ports; Canada, Europe, Honolulu

Generated on 2024-09-12 14:37 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

The evaporator that sheds scale



SCALE is automatically cracked from the heating surfaces of Reilly and G-R Evaporators. Their evaporating efficiency is therefore maintained through long periods of operation, and attendance is negligible.

This is only one of the reasons why evaporators of G-R manufacture are installed on over 10,000,000 boiler h.p. Send for bulletin explaining all the features that have brought about the wide popularity of G-R Evaporators on every size and type of ship.

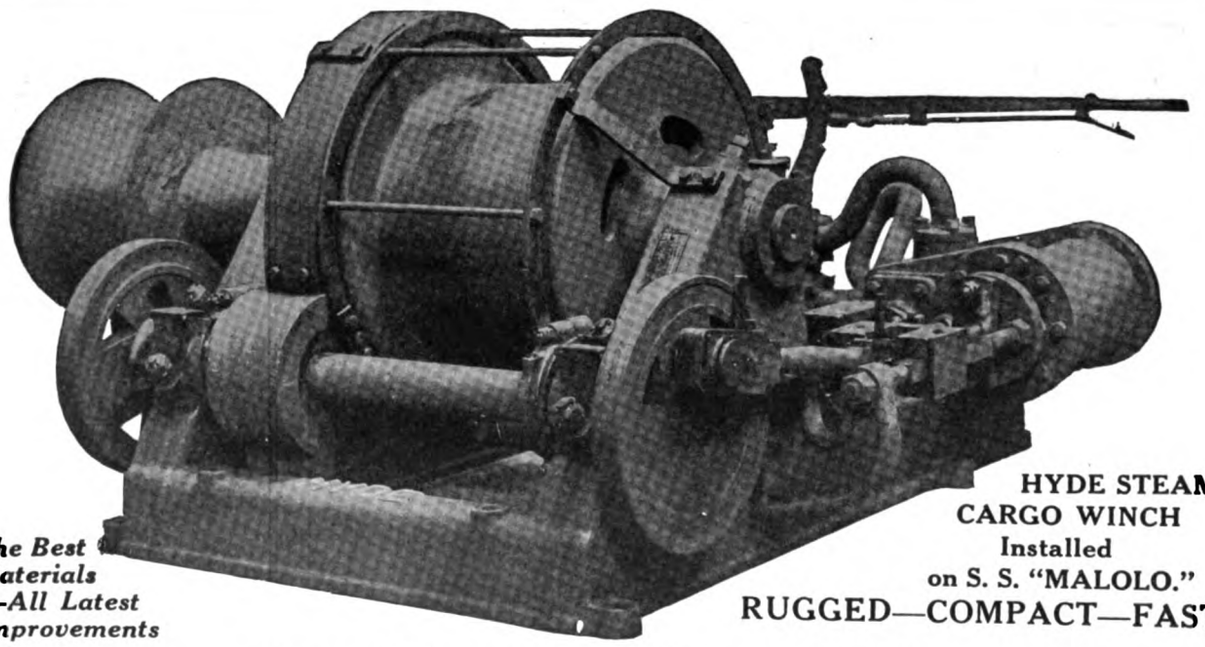
THE GRISCOM-RUSSELL COMPANY

285 Madison Ave., New York

Marine Offices:

Boston, Philadelphia, Pittsburgh, Chicago, St. Louis, Massillon, New Orleans, Houston, San Francisco, Seattle, Memphis

For Canada: Riley Engineering & Supply Co., Ltd., Toronto



The Best Materials —All Latest Improvements

HYDE STEAM CARGO WINCH Installed on S. S. "MALOLO." RUGGED—COMPACT—FAST

Why not replace your old winches with up-to-date machines?

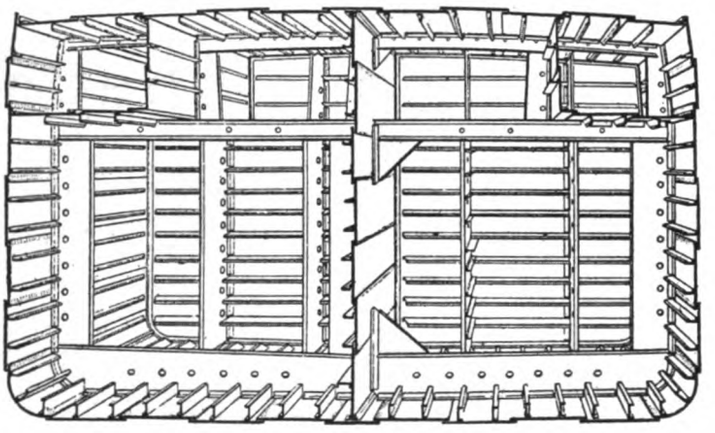
A few installations: Malika, Bienville, El Oceana, Finland, Kroonland, Katrina, Luckenbach, Walter Luckenbach, Marne, Aisne, Anaconda, Eastern Dawn, Eastern Glade, Imoko, Volunteer, Independence, J. L. Luckenbach, Julia Luckenbach, Edward Luckenbach, F. J. Luckenbach.

Steering Gears, Windlasses, Capstans, Bronze Propellers

HYDE WINDLASS COMPANY, BATH, ME.

New York Office, 172 Chambers Street

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



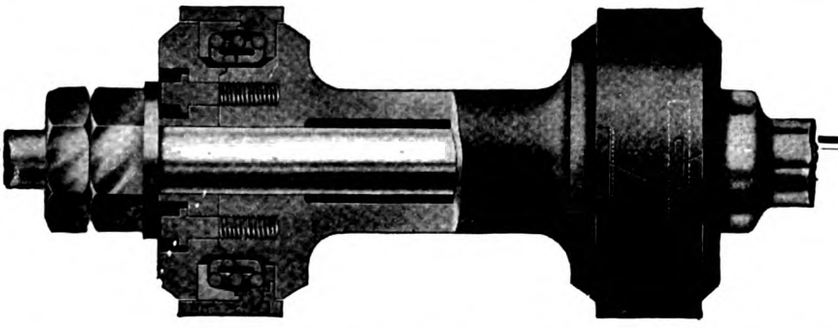
Shipowners, Shipbuilders, Naval Architects and Engineers

WHEN designing passenger, freight or other type of vessels, to insure the maximum dead-weight capacity with increased strength, together with reduced cost of maintenance, reduction in vibration, and improved ventilation, should give the "Isherwood" system or the "Isherwood Combination" system consideration.

For oil-tank ship construction The "BRACKETLESS-SYSTEM" eliminates bulkhead brackets—eliminates bulkhead leakage—greatly simplifies construction—greatly reduces cost of upkeep and cost of damage repairs. Substantially increases the longitudinal strength beyond the well-tried "Isherwood system."

For further particulars apply to

17 BATTERY PLACE NEW YORK **Sir Joseph W. Isherwood & Co., Ltd.** 4 LLOYDS AVENUE LONDON, E. C. 3



LOCKWOOD & CARLISLE

Piston Valve Rings

Built in Sizes from 8" to 25" Diameter

MANY far-sighted engineers are specifying LOCKWOOD & CARLISLE Packing for their engine pistons and piston valves. The investment is returned many times over in fuel saving.

Each year the list of ships using LOCKWOOD & CARLISLE rings increases.

Sole Agents in the U. S. A.

KEARFOTT ENGINEERING COMPANY, INC.

117 Liberty Street New York

Generated on 2024-09-12 14:27 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Where *Safety* Is Involved—

THE real value of any quieting device for Dieselized ships is measured in terms of safety.

To be sure, convenience and comfort of guests are factors to be considered; also the morale of the crew.

But safety while navigating is the main reason why *all* noise should be suppressed.

That's why Maxim Silencers are selected. They do a real job of quieting.

Maxim Silencers should go on every engine exhaust and intake; on every scavenging pump and compressor. Then safety is assured.

THE MAXIM SILENCER COMPANY
Hartford, Connecticut
Agencies in principal Cities

For oil and gas engines, air compressors, uniflow steam engines, positive pressure blowers, reducing and safety valves and similar equipment

MAXIM SILENCER

Reg. U. S. Pat. Off.

For Industrial Purposes

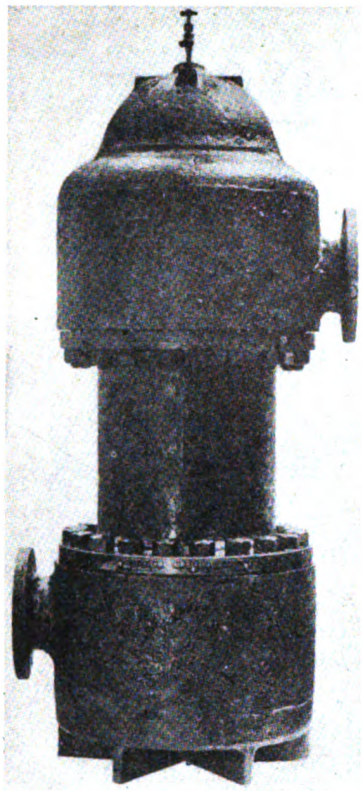
The Material for Shims

Laminum helps maintain the correct oil film. Permits bearings to be keyed up with precision. Laminum is true in gauge; surface smooth; thickness accurate. It PEELS, thus saving labor and costs.

Laminum comes in sheets 6″ x 36″. Shims made to order. Send us an old shim or templet so that we can duplicate specifications. Your shim will be returned with order. Write for sample of Laminum and complete details.

LAMINATED SHIM COMPANY, Inc., 237 14th Street, Long Island City, N. Y.
St. Louis: Mazura Mfg. Co. Detroit: 2017 Dime Bank Bldg.
Eastern Marine Repair Representative
NEW YORK MARINE ENGINEERING CO.
T. A. McQuilling, 116 Broad Street, New York, N. Y.

Generated on 2024-09-12 14:49 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



HICKMAN AIR SEPARATOR for Matson Express Steamer "MALOLO." One fitted to each main boiler feed line. Capacity (each)—135,000 lbs. per hour. Working pressure—300 lbs. per square inch.

MINIMIZE CORROSION COSTS

by using

THE HICKMAN AIR SEPARATOR

Protects boiler or condensing equipment and piping from corrosion and erosion by removing the entrained gases in feed water or condenser cooling water.

There is an engineer in your vicinity qualified to give you prompt and efficient service on matters pertaining to THE HICKMAN AIR SEPARATOR.

MARINE REPRESENTATIVES

New York
F. M. Malany Co.
Singer Bldg.

Baltimore
Proctor Engineering Co.
28 South Gay Street

Boston
Warren Steam Pump Co.
101 Milk Street

Pittsburgh
Steam Equipment Mfg Company
Jenkins Arcade Bldg.

Philadelphia
Harry S. Parks Co.
Real Estate Trust Bldg.

Cleveland
Wallene Engineering Co.
1783 East 11th Street

Seattle
R. L. Dyer
201 Nat'l Bank of Commerce Bldg.

St. Paul
R. B. Whitacre & Co., Inc.,
205 South Robert Street

Over 800,000 horsepower now in service

Bulletin M-3 contains valuable data and we will gladly mail it to you upon request.

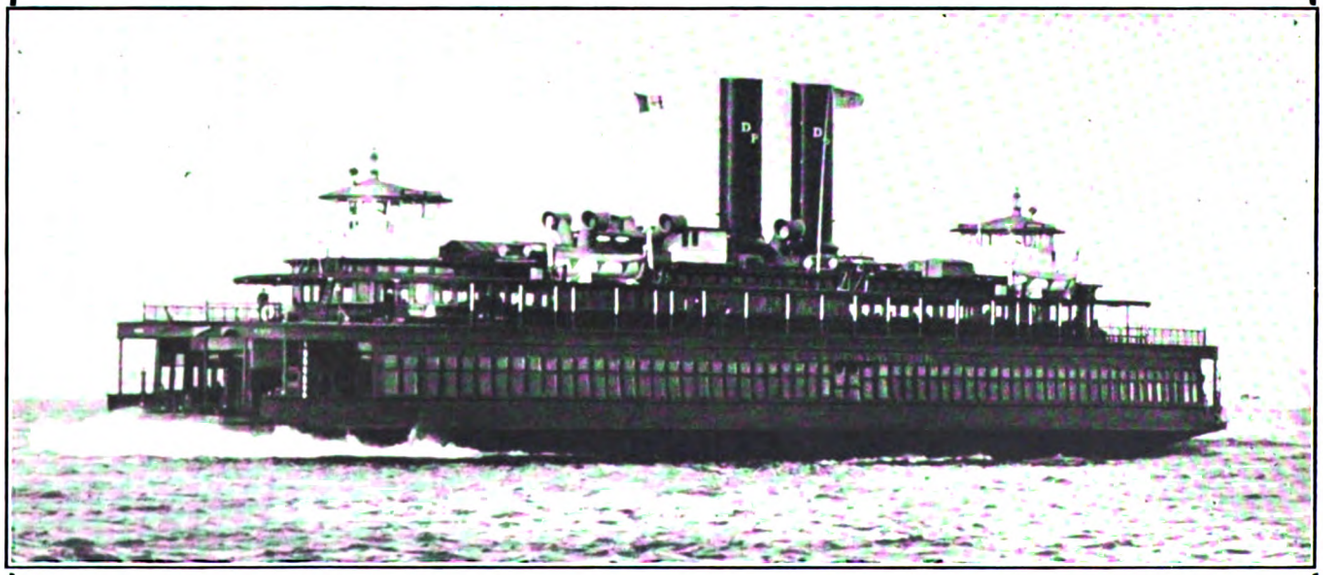
Western Engineering Company

215 Market Street San Francisco, U. S. A.

American Legion
New York City's Largest Ferry equipped with two

CUTLESS RUBBER STERN BEARINGS

SHAFTS OVER LINER 14″ **APPR. WEIGHT ON EACH BEARING, 6 TONS**

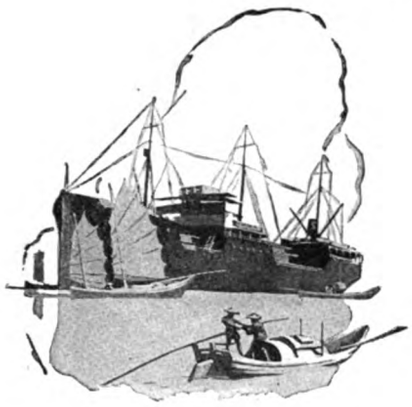


MARINE RUBBER BEARING SERVICE
Estimates - Blueprints - Installations Supervised **Sole Distributors for New York Territory**

TOPPING BROTHERS

VARICK & VAN DAM STS. **NEW YORK CITY**

Generated on 2024-09-12 15:01 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



"STANDARD" Diesel Fuel Oil

The vast organization and scope of the Standard Oil Company of New Jersey make it possible to offer shipping interests world-wide facilities for bunkering with "Standard" Diesel Fuel Oil. Our Diesel Oil is a highly refined and clean product, suitable for use in all full Diesel engines. It is recommended by the leading Diesel manufacturers.

"STANDARD" Diesel Fuel Oil

Distributing Stations

Atlantic Coast
New York
Baltimore
Norfolk
Charleston

Gulf Coast
Baton Rouge
New Orleans
Baytown

Pacific Coast
San Francisco
Richmond
San Pedro
San Diego
Astoria
Portland
Point Wells
Seattle
Aberdeen
Longview
Ketchikan
Juneau
Seward
Tacoma
Willbridge

Hawaiian Islands
Honolulu

Canada
Halifax
Vancouver
Prince Rupert
Montreal

Panama Canal
Balboa

West Indies
St. Thomas
Trinidad

South America
Campana
Buenos Aires
Talara

Azores
Ponta Delgada

United Kingdom
Purfleet
Southampton
Liverpool
Brixham
Hull
Newcastle
South Shields
London
Thames Haven
Avonmouth
Glasgow
Belfast

Norway
Bergen
Oslo (Steilene)

Finland
Helsingfors

Denmark
Copenhagen
Nyborg
Aarhus
Aalborg

Sweden
Stockholm
Gothenberg
Helsingborg
Malmo

Germany
Hamburg
Nordenham

Holland
Amsterdam
Rotterdam

Belgium
Antwerp

Italy
Genoa

Africa
Bizerta
Algiers

Turkey
Constantinople

Suez Canal
Port Said

Straits Settlement
Singapore

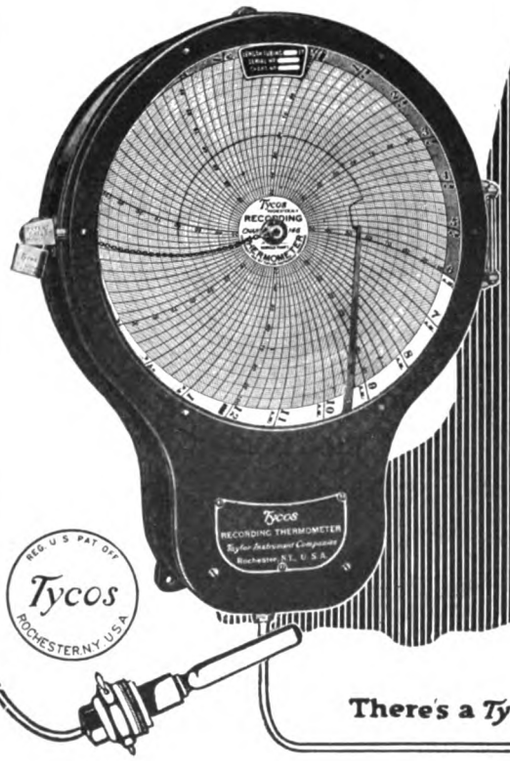
Greece
Piraeus

Roumania
Constantza

China
Hong Kong
Shanghai

STANDARD OIL COMPANY OF NEW JERSEY-26 Broadway, New York

Send for Power Plant Catalog, Part 1



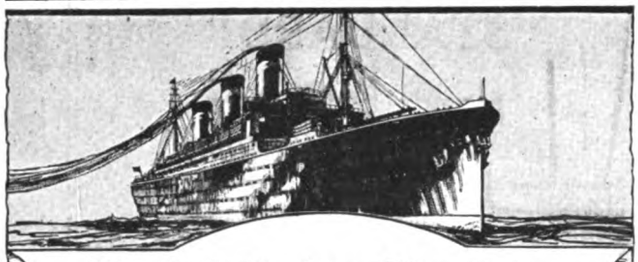
Tycos Temperature Instruments

INDICATING
RECORDING
CONTROLLING
for
every purpose

Taylor Instrument Companies
ROCHESTER, N.Y. U.S.A.
Canadian Plant
Tycos Building, Toronto, Canada

There's a *Tycos* or *Taylor* Instrument for Every Purpose

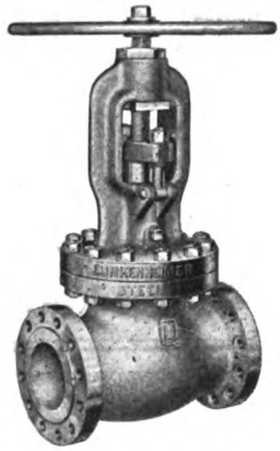
Generated on 2024-09-12 14:52 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



When Marine Service conditions involve unusually high pressures and temperatures

specify

LUNKENHEIMER STEEL VALVES



The Lunkenheimer Company has pioneered in the manufacture of Steel Valves. Many of the outstanding high pressure industrial plants and central stations are Lunkenheimer equipped throughout.

The experience gained through active participation in the attainment of high pressure and temperature economies in the industrial field, combined with an accurate knowledge of marine service requirements and developments, enables this organization to lend valuable assistance in the selection of high pressure Steel Valves for Marine Service.

Inquiries for further information will receive prompt attention.

THE LUNKENHEIMER CO.
"QUALITY"
CINCINNATI, OHIO, U. S. A.
NEW YORK CHICAGO BOSTON PHILADELPHIA
PITTSBURGH SAN FRANCISCO NEW ORLEANS
LONDON
EXPORT DEPT. 318-322 HUDSON ST., NEW YORK

15-48M-25

Then only, far under in the depths of her hold,
Some gleam of its wonder man's eye may behold.
—SWINBURNE.

EACH beam, each well fitted timber, each sturdy rib and plank strong enough to stand the wildest gale,—and she's tight if properly caulked.

The experienced sailor knows the value of tight seams—no one need tell him that—but thousands of ships on the seven seas assure him that his seams will be *tightest* when caulked with

STRATFORD OAKUM

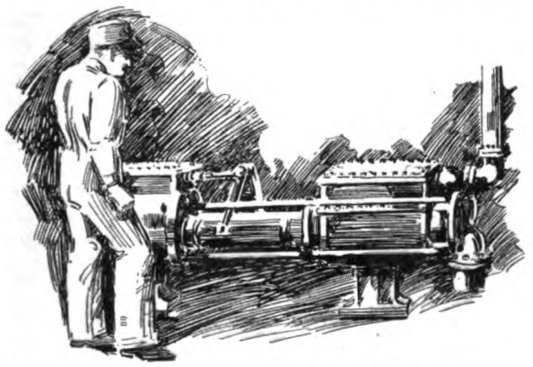
For almost a century Stratford Oakum has caulked the seams of the finest vessels that sail the seas. Be sure you get genuine Stratford Oakum. There is no other "just as good."

George Stratford Oakum Co.
JERSEY CITY, NEW JERSEY
Also manufacturers of Cotton Wiping Waste

6

Generated on 2024-09-12 14:24 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

DON'T LET YOUR PUMPS WASTE STEAM



Just look at the valves in the fluid end of the pumps. Probably you haven't examined them for a long time, merely because the pumps have gone on month after month without attention or trouble. Look at them today.

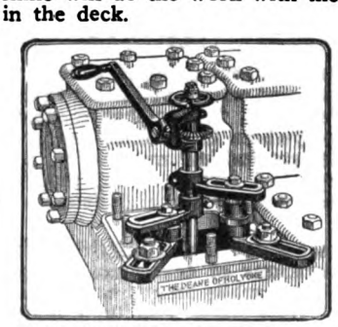
If the seats don't need refacing, your pump is an exception because nine out of every ten that come under our observation have leaky valves. The seats need recutting.

Leaky valves reduce the capacity of the pump requiring more stokage and more steam.

The easiest way to reface those seats and make them smooth and true is with

THE DEXTER PUMP VALVE RESEATING MACHINE

This machine will do the work with the valves in position in the deck.



THE DEXTER PUMP VALVE RESEATING MACHINE

Write now for Catalog No. 23 describing this machine as well as Dexter Machines for reseating globe valves and Dexter Machines for reseating gate valves.

THE LEAVITT MACHINE CO.

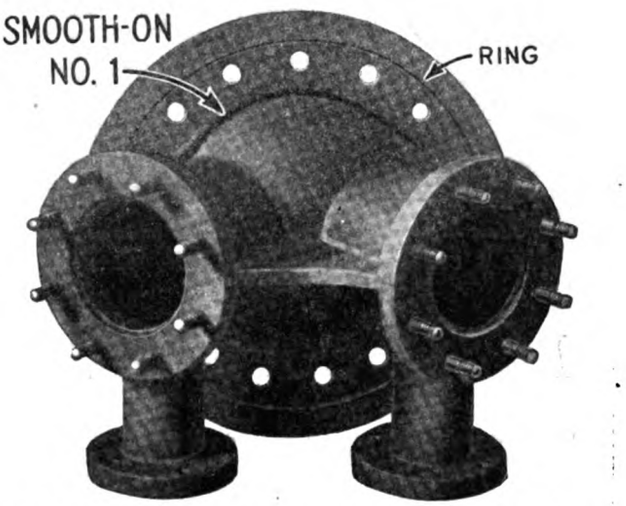
13 East River Street Orange, Mass., U. S. A.

CANADIAN AGENCY:
Darling Bros., Ltd., 120 Prince Street, Montreal.

BRITISH AGENCY:
Cromil & Piercy, Ltd.,
E. Floor, Milburn House, Newcastle-on-Tyne.

DEXTER VALVE RESEATING MACHINES

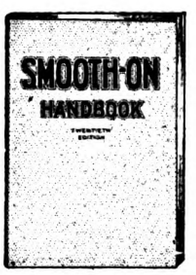
This clever repair, made in Australia, avoided very heavy loss



The back cover of a 60-ton horizontal steam-driven 15-in. x 22-in. compressor cracked and put the compressor out of commission. The crack crossed one of the bolt holes, extended up to the edge of an outlet, 4 inches from the rim, and around the raised center of the cover about 8 inches.

A quick repair was made by filling the crack with Smooth-On No. 1 and shrinking a steel ring around the edge of the cover. Expansion of Smooth-On in the crack and contraction from the ring made the break doubly tight. 18 Months after, the Smooth-On repair was still tight.

The engineer who made this repair also reports excellent success with Smooth-On No. 1 applied to scored and pitted flange faces that had previously developed bad leakage in high-pressure steam lines.



Get Smooth-On No. 1 in 1 or 5-lb. can or 25, 50 or 100-lb. keg from your nearest dealer or if necessary, direct from us.

This BOOK FREE

if you return the coupon

Twentieth Edition—136 pages of data—193 diagrams, pictures and practical hints on at least 200 different uses for SMOOTH-ON. Every progressive engineer should have this book—get your copy NOW.

Do it with SMOOTH-ON

SMOOTH-ON MFG. CO.
DEPT. 21, 570 COMMUNIPAW AVE., JERSEY CITY, N. J.

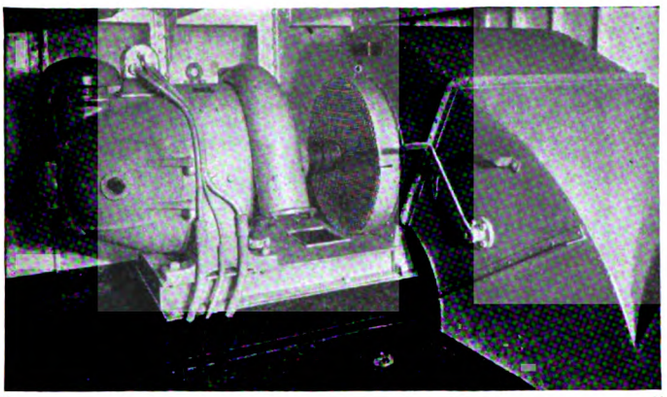
Please send copy of the SMOOTH-ON Handbook, Twentieth Edition.

NAME .....

ADDRESS .....

12-28 .....

Generated on 2024-09-12 14:48 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



Above is shown one of two Sturtevant Ventilating Fans used for main generator and motor cooling on the M. S. Courageous now being fitted out by Federal S.B. & D.D. Co., for the Shipping Board.

M. S. COURAGEOUS
Sturtevant Equipped

The world's largest electric freighter—Motorship Courageous—soon will be ready for her trial trip. This is the first of three large freighters now being reconditioned for the Shipping Board, and will be equipped with Diesel electric drive.

Included in her equipment are Sturtevant Ventilating Fans used for general ventilating purposes, and also for cooling the generators and propulsion motors.

Sturtevant Marine Equipment is found on all classes of ships. Freighters, passenger liners, battleships, cruisers, destroyers, ferry boats, and yachts all get the same dependable service from Sturtevant Equipment because it is built to give unfailing performance which is so essential in meeting Marine requirements.

B. F. Sturtevant Company

Hyde Park, Boston, Mass.

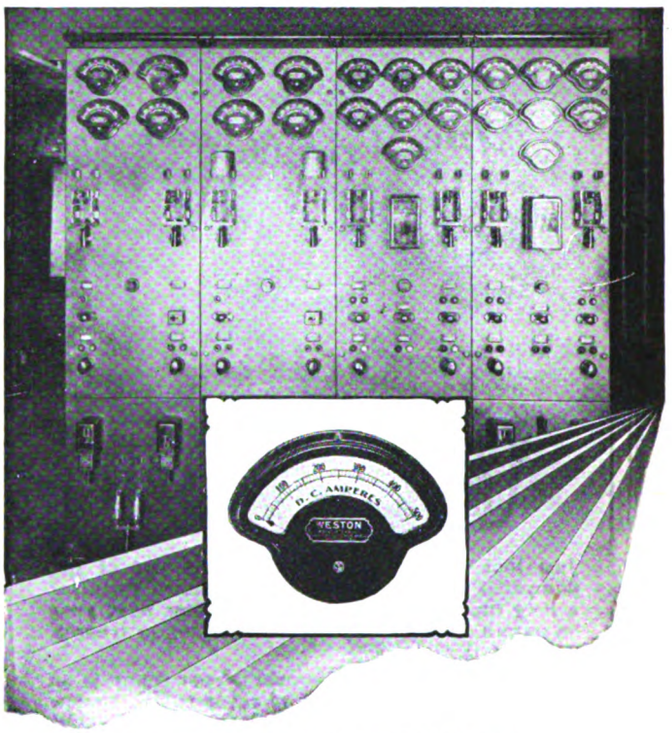
Plants at: Berkeley, Cal. Camden, N. J. Framingham, Mass. Galt, Ontario Hyde Park, Mass. Sturtevant, Wisc.

Offices in Principal Cities.

Sturtevant

(REG·U·S·PAT·OFF·)

Marine Equipment



For MARINE SWITCH BOARDS
Four Famous D.C. Fan-Shaped Models

NO instruments ever designed have met with greater popularity and wider application to the marine field than the Weston D. C. Fan-shaped instruments. They are everywhere in evidence—on ocean liners and harbor craft, steamships, motorships, yachts, suction dredges, tugs and ferries. And they are especially applicable to engine-room and dynamo-room switchboards.

Their compact shape and sturdy, reliable construction offer considerations of economical importance to the marine engineer, while from an operating standpoint their long legible scales and bold uniform markings provide for ease and accuracy in making quick readings.

There are four standard Fan-Shaped models, furnished as Voltmeters and Ammeters for marine use in a comprehensive list of ranges. They vary in width from 4-3/32" in the smallest size to 9-5/16" in the largest. All instruments are of the surface type with back connections and are shielded from external magnetic fields. Accuracy, 1%.

The same design and electrical characteristics may be obtained in a water-tight model for more exposed locations. This is known as Model 458. It is for D. C. only, the same as the four models described above, and is made as Voltmeters and Ammeters with ranges and scales as desired.

For complete description, electrical characteristics, ranges, etc., write for Bulletin No. 21.

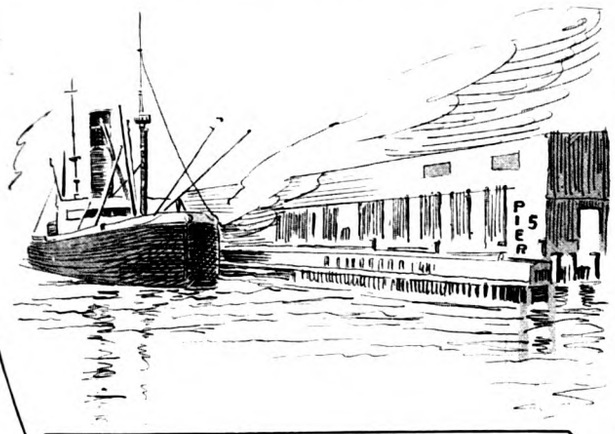
WESTON ELECTRICAL INSTRUMENT CORPORATION

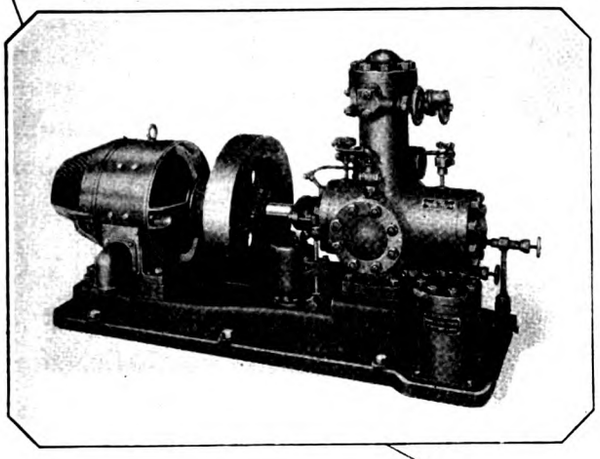
586 Frelinghuysen Ave., Newark, N. J.

Weston PIONEERS SINCE 1888 INSTRUMENTS

Generated on 2024-09-12 15:02 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

All that Science can contribute





Modern Refrigeration has added much to the ease and comfort of travel. Perishable cargoes are carried safely around the world. Ship fare is as appetizing as if fresh from the market. Ice is to be had at every meal.

York Engineers have played a big part in this transformation. All that science can contribute toward dependable Refrigeration aboard ship has been perfected in the manufacture of York Ice and Refrigerating Machinery.

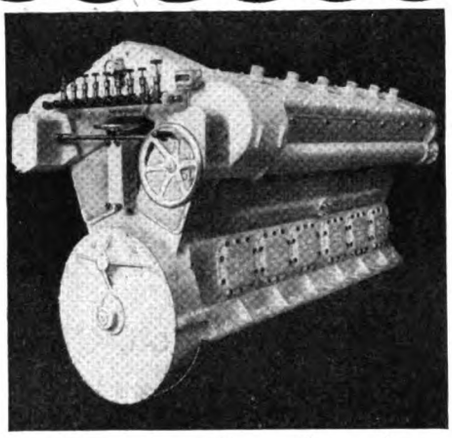
There is a York machine for every Refrigeration purpose aboard ship. Write for further information.

YORK
ICE MACHINERY CORPORATION
YORK PENNA

THE TRUE ENGINE IS THE ENGINE BUILDER

A 12-CYLINDER TREIBER DIESEL

developing 750 hp. at 700 r. p. m. and weighing less than 25 lbs. per hp.



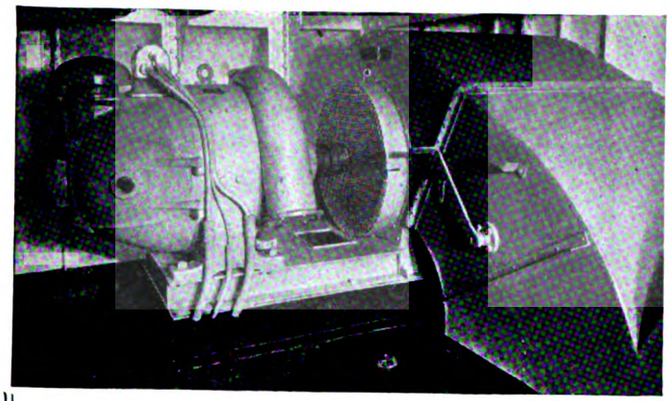
Need an engine be so heavy that it tends to defeat its own purpose? Shall the small yacht give up the idea of speed? Must vibration be a stumbling block to the installation of giant Diesels?

The man familiar with Treiber Diesels at once answers, "No!" For he is aware that Treiber Diesels are made in models as light as 20 lbs. to the hp.; that a 6-cylinder, 5″ x 7″ Treiber Diesel, capable of 100 hp., weighs but 2200 lbs.; that the 12-cylinder, 16″ x 16″ Treiber Diesel of 3000 hp., weighing only 64,000 lbs., is precision-built to prevent vibration.

As a first step toward becoming more familiar with these remarkable engines, write to us for a completely descriptive bulletin on the particular engine in which you are interested.

TREIBER
DIESEL ENGINE CORP.
DEPT. M. E. CAMDEN, N. J.

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



Above is shown one of two Sturtevant Ventilating Fans used for main generator and motor cooling on the M. S. Courageous now being fitted out by Federal S.B. & D.D. Co., for the Shipping Board.

M. S. COURAGEOUS

Sturtevant Equipped

The world's largest electric freighter—Motorship Courageous—soon will be ready for her trial trip. This is the first of three large freighters now being reconditioned for the Shipping Board, and will be equipped with Diesel electric drive.

Included in her equipment are Sturtevant Ventilating Fans used for general ventilating purposes, and also for cooling the generators and propulsion motors.

Sturtevant Marine Equipment is found on all classes of ships. Freighters, passenger liners, battleships, cruisers, destroyers, ferry boats, and yachts all get the same dependable service from Sturtevant Equipment because it is built to give unfailing performance which is so essential in meeting Marine requirements.

B. F. Sturtevant Company

Hyde Park, Boston, Mass.

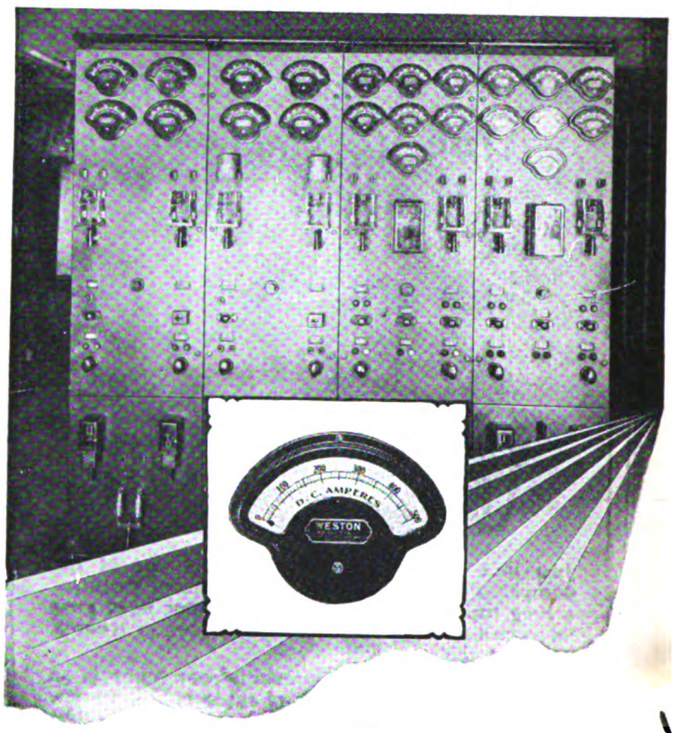
Plants at: Berkeley, Cal. Camden, N. J. Framingham, Mass. Galt, Ontario Hyde Park, Mass. Sturtevant, Wisc.

Offices in Principal Cities.

Sturtevant

(REG·U·S·PAT·OFF·)

Marine Equipment



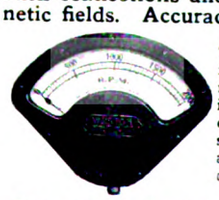
For MARINE SWITCH BOARDS

Four Famous D.C. Fan-Shaped Models

NO instruments ever designed have met with greater popularity and wider application to the marine field than the Weston D. C. Fan-shaped instruments. They are everywhere in evidence—on ocean liners and harbor craft, steamships, motorships, yachts, suction dredges, tugs and ferries. And they are especially applicable to engine-room and dynamo-room switchboards.

Their compact shape and sturdy, reliable construction offer considerations of economical importance to the marine engineer, while from an operating standpoint their long legible scales and bold uniform markings provide for ease and accuracy in making quick readings.

There are four standard Fan-Shaped models, furnished as Voltmeters and Ammeters for marine use in a comprehensive list of ranges. They vary in width from 4-3/32" in the smallest size to 9-5/16" in the largest. All instruments are of the surface type with back connections and are shielded from external magnetic fields. Accuracy, 1%.



The same design and electrical characteristics may be obtained in a water-tight model for more exposed locations. This is known as Model 458. It is for D. C. only, the same as the four models described above, and is made as Voltmeters and Ammeters with ranges and scales as desired.

For complete description, electrical characteristics, ranges, etc., write for Bulletin No. 21.

WESTON ELECTRICAL INSTRUMENT CORPORATION

586 Frelinghuysen Ave., Newark, N. J.

Weston PIONEERS SINCE 1888 INSTRUMENTS

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

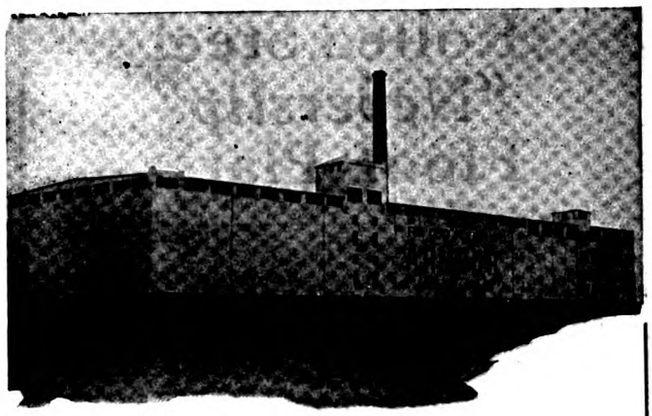
Cut down the cost of maintaining Your power lines

VULCABESTON
Compressed Asbestos Sheet Packing

No. 601 - Red - Extreme Style No. 701 - White - Medium Style
No. 801 - Black - Standard Style

Gaskets cut from this material meet your every requirement for heat and pressure resistance, unfailing reliability and economical service.

COLT'S PATENT FIRE ARMS MFG. CO.
MECHANICAL GOODS DIVISION
HARTFORD, CONNECTICUT, U. S. A.
NEW YORK · BOSTON PHILADELPHIA · PITTSBURGH · CHICAGO SAN FRANCISCO 33-P-87

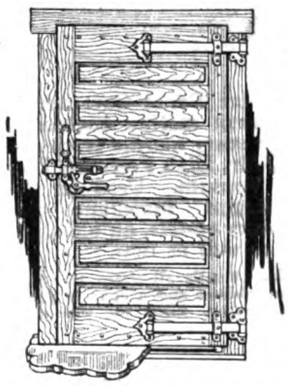


NAMES
that mean something!

There are names that mean something wherever they go. There are industrial names that are just as widely known as the emblems of the great trans-oceanic lines.

Wherever you find these great institutions, and wherever you find seaworthy vessels, you may expect to find another name that means just as much in its field. Cold storage just naturally suggests the name "Jamison."

The Buenos Aires plant of Armour & Co., shown above, has forty-five Jamison Doors in service. The list of those who use our product is significant.



Jamison Cold Storage Doors are stocked in all standard sizes and are made to any specifications desired. The door shown is the standard Jamison Cooler Door. All Jamison units are ruggedly constructed, of high-grade materials, and are equipped with massive hardware that defies trouble. Our catalog will be sent on request.

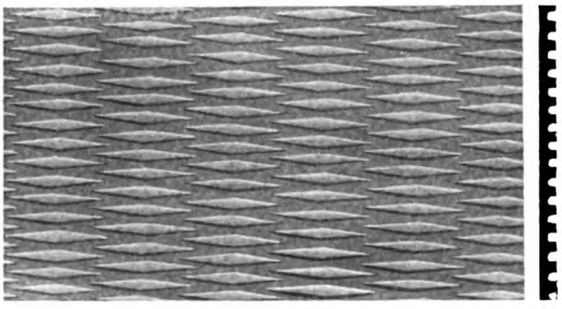
JAMISON COLD STORAGE DOOR CO.,
HAGERSTOWN, MD., U. S. A.

FACTORY AGENTS AND DISTRIBUTORS:
Gay Engineering Corporation, 2650 Santa Fe Avenue, Los Angeles, 525 Fourth St., San Francisco; Stanton-Thompson Corporation, 2 W. 45th St., New York City

OLDEST and LARGEST makers of Cold Storage DOORS

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

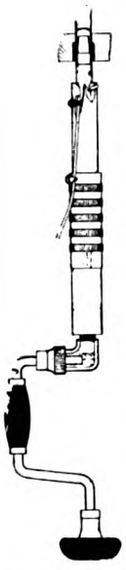
Rolled Steel "Neverslip" Floor Plates



Raised Diamond
Diamond and Ribbed Pattern

American Pressed Steel Co.
Philadelphia, Pa.
The original diamond pattern floor plate.

CONDENSERS



RE-TUBED AND REPACKED

WE render a specialized service in repacking condenser tubes that cannot be duplicated for efficiency, speed and economy. This is due to using a special tool designed by us to quickly and uniformly pack with any size braid. A real advancement in this particular class of work that has met with instant and unqualified endorsement of leading industrial and marine engineers.
Complete information will be furnished or a demonstration will be given upon request.

BLAIN & COMPANY
Incorporated
Specializing in Steam Condenser Work
310 TWELFTH ST. HOBOKEN, N. J.
Telephone Hoboken 1040

The IDEAL Governor is fully described in Junior Catalog No. 21

Have you asked for your copy?

The IDEAL Marine Pump Governor is the favorite among marine engineers. It is suitable *for every marine service*—for Water, Oil, Air, High Pressure, Low Pressure, and Vacuum. Used on the largest merchant and navy vessels, on old ships as well as new.

Junior Catalog No. 21 tells all about it. Send us your name and address and a copy is yours. The blank spaces below, filled in, will serve the purpose.

NAME .....
Address .....
.....
Firm .....

For complete line of Atlas Regulating Valves and devices see classified listings in this issue of Marine Engineering and Shipping Age.

ATLAS VALVE COMPANY
REGULATING VALVES FOR EVERY SERVICE
283 South Street Newark, N. J.

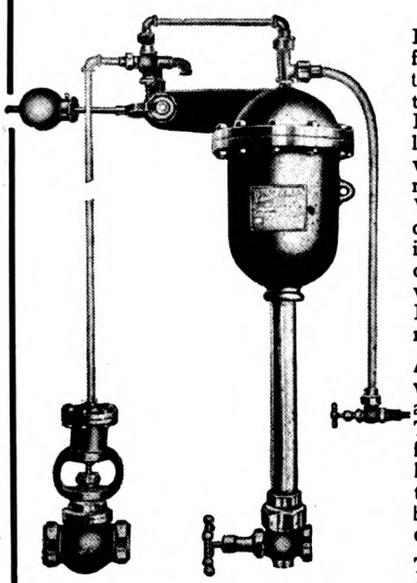
BRUNSWICK-KROESCHELL REFRIGERATION for the COURAGEOUS

Brunswick-Kroeschell Refrigeration was selected for another notable marine achievement. The U. S. Shipping Board's conversion of the COURAGEOUS, TRIUMPH and DEFIANCE included the installation of Brunswick-Kroeschell Refrigeration "The Standard for ALL Marine Installations."

BRUNSWICK-KROESCHELL COMPANY
Refrigerating & Ice Making Machinery
NEW BRUNSWICK, N.J. - CHICAGO, ILL.
BRANCHES, AGENCIES AND SERVICE IN PRINCIPAL CITIES

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Dry steam *always*



Even in boilers forced far beyond their rated capacity, the Vigilant Marine Feed Water Regulator keeps the water constantly at middle gauge. Water in the cylinders, boiler priming, or, on the other hand, low water, are barred. Dry steam is a reality always.

Ask your engineer what dry steam at all times means. The steady, even feed of the Vigilant saves from 6 to 15% coal and banishes explosion danger.

The details are yours for the asking.

CHAPLIN-FULTON MFG. CO.

28 Penn Avenue, Pittsburgh, Pa.
EASTERN REPRESENTATIVES
H. F. REYNOLDS, 26 Cortlandt St., New York
ENGINEERING CO. OF PHILA., Harrison Bldg., Phila.

The Cleveland Steel Tool Co.

660 East 82nd Street
Cleveland, Ohio.

Largest Exclusive Manufacturers of

Punches,
Dies,
Chisels,
Rivet Sets,
Coupling Nuts,
Punch Stems,
Punch Holders
and Die Blocks.

—If it's RIVETED you KNOW it's safe—

THE CRANDALL ENGINEERING CO.

ENGINEERS

BOSTON MASS.

Designers of
RAILWAY DRY DOCKS
FLOATING DRY DOCKS
BASIN DRY DOCKS

8000 TON FLOATING DOCK
CHARLESTON DRY DOCK & MACHINE CO.
CHARLESTON, S. C.

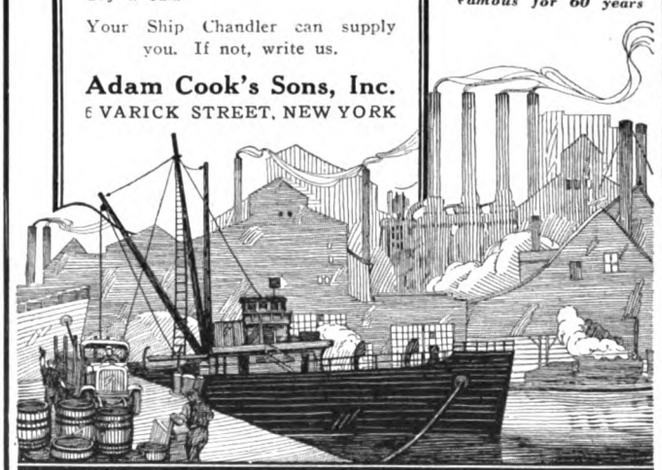
A Perfectly Balanced Lubricant for Ships

Albany Grease possesses a perfection of quality without parallel in the lubrication field. A 100% pure tallow lubricating compound. Its use on ship machinery insures a condition of perfect lubrication and increased power. Never drips. Try a can.

Your Ship Chandler can supply you. If not, write us.

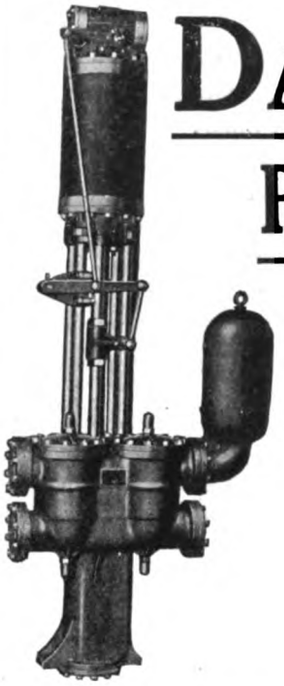
Adam Cook's Sons, Inc.
6 VARICK STREET, NEW YORK

Look for this Trade Mark—Refuse Substitutes.
Famous for 60 years



ALBANY GREASE

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



DAVIDSON PUMPS

FOR ALL MARINE PURPOSES

Write for Latest Catalog

M. T. DAVIDSON CO.

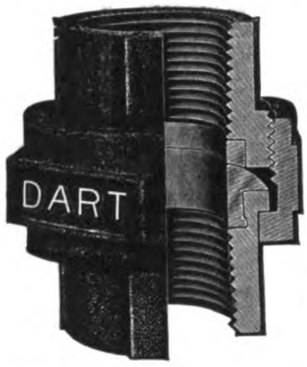
154 Nassau St., New York

135 Oliver St. ..... Boston
560 North 16th St. ..... Philadelphia
430 Transportation Bldg. ..... Wash., D. C.

Two Bronze Spherical Seats in combination with Malleable Pipe Ends give the

DART UNION

a distinctive feature which has been unequaled. It is the acknowledged leader



E. M. DART MFG. CO., Providence, R. I.
THE FAIRBANKS CO. & BRANCHES, Distributors

Canadian Factory
DART UNION CO., Ltd., Toronto

The COOKE Seal Ring

A Mechanical Device Sealing Any Rotating Shaft in the Stuffing Box and Revolving *with* it.

Applications	*Eliminates*
Ammonia	Packing
Sulphur Dioxide	Leaks
Carbon Dioxide	Expense
Gases	Trouble
Air	Scored Shafts
Water	Hot Boxes
Brine	Shut Downs
Gasoline	Dirt
Oils	Motor Overload
Liquids	Oil Waste
Pressure or vacuum	90% Friction

write to

COOKE Seal Ring
Dept. I
24 North Green St.
CHICAGO, ILL.

DIXON'S GRAPHITE SEAL

for any point where there is no water present

DIXON'S Graphite Seal fills a long felt need for a sealing paste that would *effectively seal* tank hand-hole and man-hole plates: air, vacuum, gas, vapor, and high pressure steam lines; cylinder heads, oil burners, gasoline engines, Diesel engines, turbines, generators, pumps and similar equipment used to handle mineral, animal and vegetable oils. It is not to be used on water lines. It makes a screw thread, flange or gasket joint tight . . . sealed . . . and is not soluble in hot or cold oils, gasoline and similar solutions.

Every industrial plant has numerous uses for this product. Every maintenance man should be familiar with its ability to make joints *leak-proof and permanently tight.*

The full story is in Circular No. 45 DS a copy of which is yours for the asking.

JOSEPH DIXON CRUCIBLE COMPANY
Jersey City New Jersey
Established 1827

Generated on 2024-09-12 14:30 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

HAMBURG-AMERICAN LINE

Passenger Services

New York to Cherbourg, Southampton and Hamburg.

New York to Cobh (Queenstown), Cherbourg and Hamburg.

Pleasure Cruises

Around the World.
To the West Indies.
To Northern Wonderlands.
To the Mediterranean.

Freight Services

New York to Hamburg direct.
Boston to Hamburg (via New York)
Philadelphia, Baltimore and Norfolk to Bremen and Hamburg
Also direct freight service from North Pacific Ports to Hamburg, Bremen and Antwerp.

HAMBURG-AMERICAN LINE
39 Broadway, New York

HEALTHY BOILERS

Not a Filter

Not a Compound

Watercooled Filtrator on S.S. Walter Jennings, Standard Oil Co. (N. J.)

FILTRATOR

ASSURES
CLEAN BOILERS
WITHOUT CHEMICALS

The Filtrator System is an absolutely NON-CHEMICAL process for keeping boilers free from scale, pitting and corrosion.

Pamphlet on request

FILTRATORS COMPANY
96 Liberty St., New York

HASKELITE*

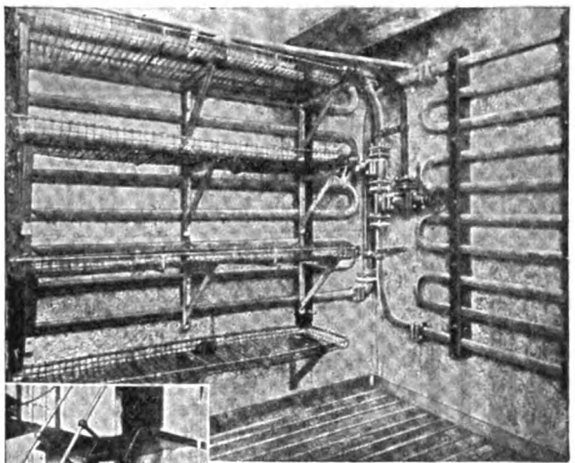
bulkheads save valuable space

Haskelite Manufacturing Corporation

120 South LaSalle Street, Room 1120
Chicago, Illinois

***Blood albumen glue plywood combines maximum strength and stiffness with light weight. Will not crack nor warp. Unaffected by dampness.**

MESA 12-Gray



Refrigerated space is profitable space aboard ship. And it is remarkable what proper refrigeration will do, in keeping foods. Quantities of fresh foods are now being shipped on regular schedule from Seattle to Manila, using mechanical cooling.—Get a Frick Plant and share in the convenience and higher returns offered through modern refrigeration.

Frick Company
WAYNESBORO, PA., U.S.A.
ICE MACHINERY SUPERIOR SINCE 1882

Generated on 2024-09-12 14:53 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

EST. 1898 INCORPORATED 1922

JOHN F. McKENNA, Inc.

Erie Basin Brooklyn, N. Y.

LUMBER AND TIMBER

of every description sawn or dressed to order for Shipyards, Steamships, Factories, Dock Builders and Heavy Construction

Main Office: 58 VAN DYKE ST.

Telephone 4788, 4789, 4711 } Cumberland

Yellow Pine Yard, Saw and Planing Mill.
FOOT OF BEARD AND OTSEGO STS.

Meeting Your Requirements

That's our job. Regardless of the size or type of Marine equipment you plan to build, we can meet your requirements.

Our experienced organization and shop equipment insure workmanship that makes Manitowoc-built ships and marine equipment outstanding in marine circles.

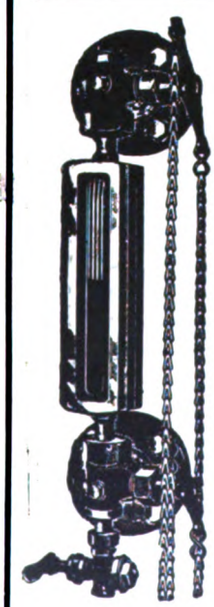
Let us figure on your requirements.

MANITOWOC SHIPBUILDING CORP.
Manitowoc, Wisconsin

MANITOWOC

JERGUSON

Engineering Specialties



REFLEX WATER GAGES

Used on all types of boilers by all the Principal Navies of the World

"The Water Shows Black"

ADVANTAGES:

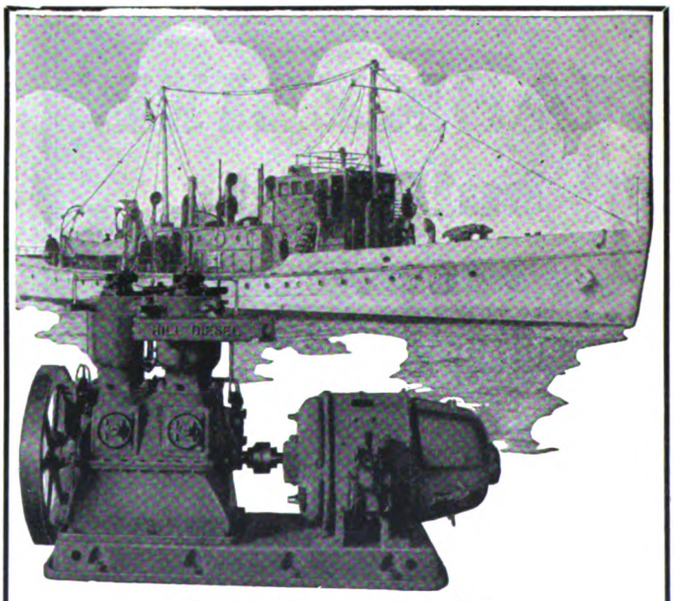
Quick and reliable observation of the water level. Safe, sure and durable at high pressures. Not affected by cold air drafts. Most effective protection against injuries to boilers and workmen. Easily applied to all types of gage glass fittings.

When filled with **WATER** the Reflex Gage always appears **BLACK.** When empty it instantly shows **WHITE.** No mistake possible. This feature alone is worth many times the cost of the **Reflex.** Send for catalog of Water Gage Apparatus.

MANUFACTURED BY THE

JERGUSON GAGE & VALVE CO.

WINTER HILL, SOMERVILLE, MASS.



LOW COST

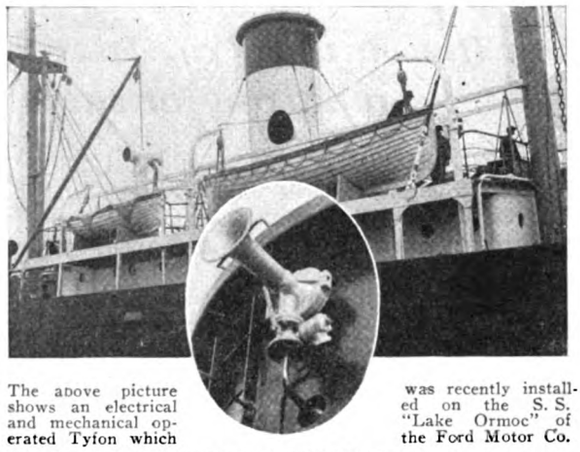
of operation and upkeep

HILL-DIESEL Auxiliary Sets operate on the same fuel as the large Diesels. Fuel consumption is not more than six-tenths pounds per H.P. hour. They are many times more economical than gasoline engines. Fuel costs are reduced 50 to 80 per cent. Correct design and high quality workmanship assure dependable units with low upkeep.

HILL DIESEL ENGINE CO.
Lansing, Michigan

Hill-Diesel Auxiliaries

Generated on 2024-09-12 15:01 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



The above picture shows an electrical and mechanical operated Tyfon which was recently installed on the S. S. "Lake Ormoc" of the Ford Motor Co.

THE TYFON

A NEW type of sound signalling apparatus possessing great clearness of tone. It sounds immediately and its full strength gives an audibility five to six times greater than that of the ordinary whistle. At the same power of sound, the steam consumption is only 1/5 to 1/30 that of whistles and sirens.
Tyfons are made in 21 sizes and types to be operated by either steam or air from 30 to 3,000 pounds per square inch.

Descriptive catalog will be gladly forwarded upon request

Nils F. Nord
74 Trinity Place, New York City

DISTRIBUTORS

PHILADELPHIA
Smith-Meeker Engineering Co.
The Bourse
Philadelphia, Pa.

WEST COAST
J. E. Dorry
1722 8th Avenue
San Francisco, Cal.

Keeps pots, pans and dishes spotless

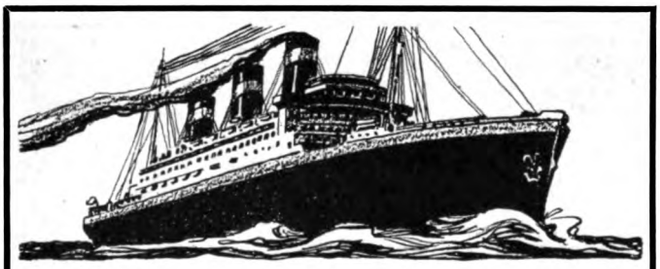
DOWN in your galley there are a dozen or more cleaning jobs that Oakite will do with speed, satisfaction and substantial savings.

Pots, pans and dishes—glasses and silverware—Oakite cleaning keeps all bright and shining. And Oakite methods are as economical as they are effective. A smaller quantity of materials does more cleaning, quicker, better and with less effort.

Nor are Oakite advantages limited to the cleaning of galleyware. At sea or in port you can entrust every shipboard cleaning job to Oakite. Our booklet tells how and why. Write for a copy. No obligation.

Manufactured only by
OAKITE PRODUCTS, INC., 54D Thames St., NEW YORK, N.Y.

OAKITE
TRADE MARK REG. U.S. PAT. OFF.
Industrial Cleaning Materials and Methods



VEHISOTE

TRADE MARK

The Standard Panel Board for

Ceilings, bulkheads, wainscoting, or wherever sheathing is required.

The only panel board that is made in *one piece*. It is waterproof, and does not separate or warp. The unanimous choice of all shipyards, naval architects and shipowners.

Samples and information gladly furnished on request.

PANTASOTE COMPANY INC.
250 PARK AVE. NEW YORK
PEOPLES GAS BLDG. CHICAGO

Best for a long run— Daniel's Marine P. P. P.

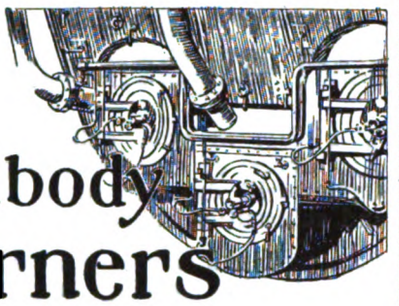
The strains and stresses of a long run at sea give plenty of work to the engineer. Packing replacement is one trouble he will avoid with Daniel's Marine P.P.P. in the stuffing box. Its self-adjustment feature reduces friction to a minimum, and insures a long wearing life. Whether used on high pressures or superheat, P.P.P gives complete satisfaction by its durable and thoroughly efficient service.

Give it a rigid test. It will meet it.

Quaker City Rubber Co.
Manufacturers of mechanical rubber goods
WISSINOMING, PHILADELPHIA

BRANCHES
New York Chicago Pittsburgh San Francisco

Generated on 2024-09-12 14:57 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



Peabody Burners

and FLEXIBILITY are INSEPARABLE

The wide firing range of Peabody Pulverized Coal and Oil Firing Systems makes them adaptable to any steaming rate. The kind of fuel makes no difference.

Ask for the details.

PEABODY ENGINEERING CORPORATION
114 East 42d Street, New York, N.Y.

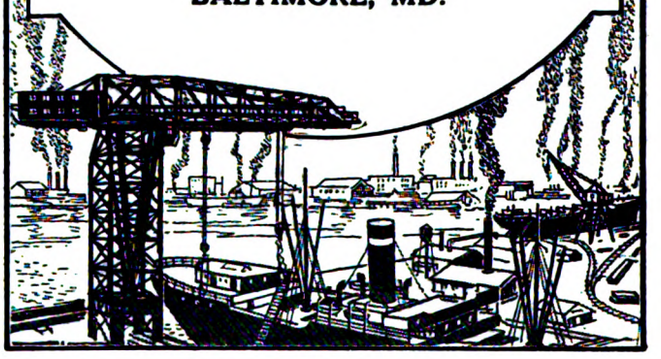
In the building or repairing of ships

EXCEPTIONALLY well located, this company's yards offer every modern facility for the speedy and economical execution of ship repair, conversion and construction.

Steel and wood floating dry docks are always available for special or emergency work.

Expert supervision over every department assures the elimination of time losses and the quickest possible delivery of vessels consistent with the highest class service.

CHAS. L. ROHDE & SONS CO.
BALTIMORE, MD.



SHIPMATE RANGES

If you are thinking of using a gas range on your boat this coming season, remember that SHIPMATE gas ranges come from the makers of SHIPMATE coal ranges.

No further comment is necessary.

SHIPMATES are made only by
THE STAMFORD FOUNDRY COMPANY
Established 1830 Stamford, Conn.

Roebling "Blue Center" Steel Wire Rope

A superior product worthy of your consideration.

John A. Roebling's Sons Company, Trenton, New Jersey.

Generated on 2024-09-12 14:20 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

On the S. S. Virginia

All air-ejector equipment on the turbo-electric propeller ship of the Panama Pacific Line was designed and furnished by C. H. Wheeler of Philadelphia.

We have developed a complete line of high vacuum apparatus to meet the requirements of this exacting service, where space and weight are of the utmost importance and where breakdowns cannot be tolerated.

We solicit your inquiries.

C. H. WHEELER MFG. CO.
19 St., Lehigh & Sedgeley Aves., Philadelphia.

"C. H. Wheeler of Philadelphia"

TURBINE SPECIALISTS

When new turbine work or repairs of any kind are considered bear in mind that the long experience of the Capstaff-Hunter Organization saves you time and money and gives positive assurance of satisfactory work.

Capstaff-Hunter carries the largest stock of Parsons turbine material in America, besides a large assortment of blading for the various other makes.

All our work is done in accordance with the latest and best turbine practice.

Repairs can be made at any port or on ships at sea. Write—phone or wire — Capstaff-Hunter is at your service.

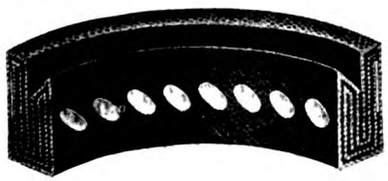
"There is no Substitute for Experience."

Capstaff-Hunter Turbine Works
Incorporated
HOBOKEN, N. J. PORT OF NEW YORK
Marine Engineers, Boiler Makers, Ship Repairers

LION Semi-Metallic PACKING

SAVES AS IT SERVES

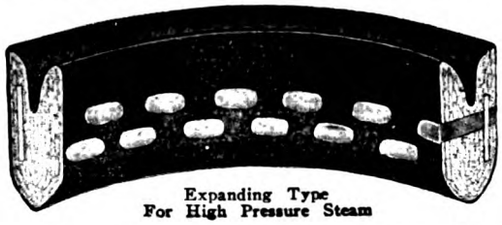
Automatic Type



For Pumps and Hydraulic Work

IT saves **frequent adjustment. The pressure acting on the lip automatically keeps it tight—eliminating loss of steam and water.**
It saves **frequent replacements. The firmly embedded metal studs reduce friction wear.**
It serves **wherever glands must be kept tight.**
It serves **for a period of time that insures real packing economy. Immediate delivery on all orders.**

Send for new complete catalog today.



Expanding Type
For High Pressure Steam

JAMES WALKER & CO., LTD.
Packing and Jointings For Every Purpose
46 West Street, New York, N. Y.

HEAVY DUTY
SHONBERG'S
ANTI-FRICTION METAL

BEAR BRAND

HEAVY DUTY IS A TIN BASE METAL

DIESEL - TURBINE - RECIPROCATING ENGINES

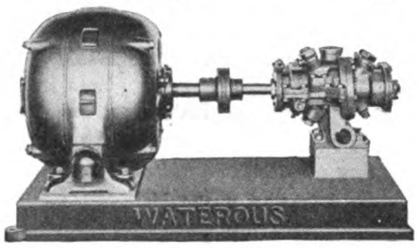
A product of 35 years' experience
Marine engineers may have a mighty handy booklet containing valuable engineering information and helpful data free and with our compliments. Write for it today!

A letter recently received from Cleveland reads in part:
"I can name a number of ships that were built in 1907-1908, that still have Bear Brand Metal in service on their Crank-shaft, Thrust bearings, etc."

I. SHONBERG INC.
122-126 Flushing Avenue, Brooklyn, N. Y., U.S.A.
Triangle 4384-5

Generated on 2024-09-12 14:20 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

The Waterous Rotary Pump



THE WATEROUS ROTARY PUMP WAS DEVELOPED IN THE FIRE FIGHTING FIELD. To meet the exacting demands placed upon it, a fire pump must be built simple and fool proof; it must be compact and highly efficient. These are reasons why the Waterous is probably the ideal rotary pump for your work. Complete information for the asking.

Waterous Dependable

WATEROUS COMPANY
Saint Paul, Minnesota
Agents in Principal Cities

LOMBARD
"Study the Structure"
DIESEL OIL ENGINES

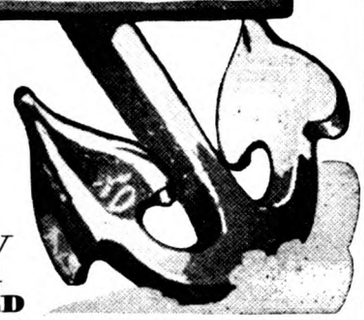
GOOD DESIGN

Reliable, four-cycle, air-injection type; each part the best of its kind for long and faithful service; all parts easy of access, simple and convenient to maintain; high fuel efficiency and low lubricating oil consumption—this summary of the advantages of Lombard-Diesel engines briefly sets out some reasons why they can and do furnish power for tugs and work boats at the

LOWEST PRICE

THE LOMBARD GOVERNOR CO.
ASHLAND, MASSACHUSETTS

FOR more than 25 years, Warren Marine Pumps have served on the finest ships in every class. Steady, dependable service, economical operation and sustained high efficiencies are the reasons why the leading marine engineers specify them as standard equipment. Centrifugal and reciprocating pumps for every service. Write for Bulletins.



WARREN STEAM PUMP COMPANY
INCORPORATED
WARREN-MASSACHUSETTS
BOSTON NEW YORK SEATTLE
SAN FRANCISCO PHILADELPHIA

2047

Established 1849

MARINE SANDS N.S.Y. 1918 PLUMBING

"THE STANDARD FOR NEARLY A CENTURY"

New Lavatory for Limited Space

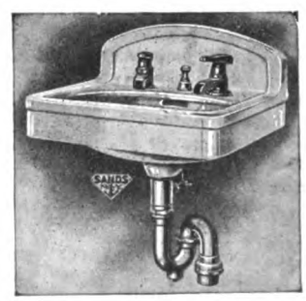


Plate F-566—The "Major" Vitro-Adamant Flat Back Apron Lavatory on Concealed Hangar, Back, slab, oval basin with overflow and anti-splash rim all in one piece. Size: 18″ x 15″ x 6″ back. This illustration shows Sands' special polished white metal Leverhandle self-closing basin faucets with short spouts, pop-up waste and cast swivel trap with union connection on outlet. Can also be fitted with N. P. brass fixtures.—With Nickel Silver $56.00. N. P. Brass $48.00.

The Quality, Construction, Equipment and Operation of "Sands" Fixtures—the Best

A. B. Sands & Son Co. 22-24 Vesey Street New York

Generated on 2024-09-12 14:49 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

CHARLESTON DRYDOCK AND MACHINE CO.

SUCCESSORS TO

VALK & MURDOCH

CHARLESTON, S. C.

Crandall Floating Dry Dock

Crandall Railway Dry Dock

Builders of Marine Boilers, Scows and Lighters

8,000-Ton Floating Drydock
Length on Blocks 440'
Depth over sill 22'

1,500 Ton Marine Ry.
Length on Blocks 220'
Depth over Blocks 14'

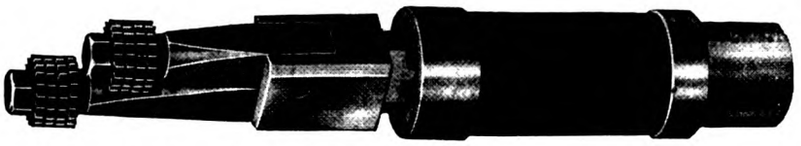
500-Ton Marine Ry.
Length on Blocks 100'
Depth over Blocks 7'

Marine Repairs a Specialty

Ships Driven by Dirty Boilers Cannot Make Good Time

Regular and systematic cleaning of your boilers will enable you to operate your ship on record time and with a decided decrease in fuel consumption.

Exhibited at Booth 11A
New York Power Show
December 3rd to 8th, 1928



The Roto 2" water-driven Tube Cleaner

THE ROTO COMPANY Sussex Avenue & Newark St. NEWARK, N. J.

THE LAST WORD in PACKING

ALFIT

We can convince you.

MERIT WILL TELL

ALFIT MANUFACTURING CO., Inc. 154 NASSAU ST.
NEW YORK CITY

BITUMASTIC REGISTERED TRADE MARK HERMASTIC REGISTERED TRADE MARK

BITUMINOUS COATINGS

for
Bilges, Tank Tops, Coal Bunkers, Inner Bottom
Tanks, Floors, Peaks, Refrigerating Spaces

WAILES DOVE — HERMISTON CORPORATION
Formerly
AMERICAN BITUMASTIC ENAMELS COMPANY
PHILADELPHIA 17 BATTERY PLACE, NEW YORK CLEVELAND

Generated on 2024-09-12 14:58 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

PROFESSIONAL DIRECTORY

Consulting and Marine Engineers, Naval Architects, Marine Surveyors, Patent Attorneys, Etc.

J. BARRAJA-FRAUENFELDER & CO.

Consulting Diesel Engineers

RESEARCH WORK, DESIGNS, SPECIFICATIONS, APPRAISALS, ESTIMATES AND REPORTS, INDUSTRIAL AND MARINE INSTALLATIONS.

PHILADELPHIA—1600 Walnut St.

O. C. CHAPMAN & COMPANY

Consulting Engineers and Naval Architects

Designs, supervision, surveys and Appraisals for merchant vessels and all types of floating equipment

524 WALNUT ST. PHILADELPHIA, PA.

Phone Lombard 5408-09

Irving Cox Bruno Terstroth Daniel H. Cox

COX & STEVENS

CUNARD BUILDING—341 MADISON AVE., NEW YORK

Naval Architects, Marine Engineers, Consulting Engineers

Ship and Engineer Surveyors and Appraisers, Ship Brokers

Cable address: "Brokerage" Telephone: Whitehall 2700

WILLIAM T. DONNELLY

Naval Architect

FLOATING DRY DOCKS—HARBOR DEVELOPMENT MODERN PIER AND WAREHOUSE DESIGN AND CONSTRUCTION—NEW METHOD OF RAPID CARGO TRANSFER—DONNELLY ELECTRIC PACKET DISPATCH FOR INLAND WATER TRANSPORTATION

TEL.—WHITEHALL 1491 17 BATTERY PL., NEW YORK

Charles W. Dyson

Consulting Engineer

Propeller designs, Estimates and Investigations of Performances

J. BARRAJA-FRAUENFELDER CO., 1600 Walnut St., Philadelphia. 1840 Lamont St., Washington, D. C.

ERIC H. EWERTZ

Consulting Engineer

Hudson Terminal Building, 50 Church St., New York

Phone 4743 Cortlandt :: New York

Specialist on welding in marine construction and engineering.

EDWARD P. FARLEY & CO.

Incorporated

Steamship Owners, Agents and Brokers

11 Broadway New York, N. Y.

THEODORE E. FERRIS

Naval Architect and Marine Engineer

Hudson Terminal Building, 30 Church St.

Phone Cortlandt 2786

Plans, Specifications and Superintendence, Steamships, Steamboats, Tugs, Etc.

LOUIS R. FORD

Consulting Engineer

Oil Engine Specialist

Marine Diesel Engineering Investigations, Reports, Specifications, Opinions, Expert Testimony, Supervision

Foot 56th St., Brooklyn, N. Y. Phone Sunset 5100.

T. A. McQUILLING

New York Marine Engineering Co.

Consulting Engineers—Ship Surveyors

116 Broad Street, New York, N. Y.

Phone Whitehall 4548 Night Phone Independence 1451

ROBERT W. MORRELL

Consulting Naval Architect

Marine Engineer **Surveyor**

20 Broad St., Room 1801, Hanover 2695

NILS F. NORD

Surveyor and Marine Engineer

74 TRINITY PLACE NEW YORK CITY

AUSTIN E. OVERMAN, Associate

DESIGN ALTERATIONS SURVEYING

TEL. WHITEHALL 3578

HORACE HOLDEN THAYER

Naval Architect and Marine Engineer

Ship, Engine and Cargo Surveyor

Witherspoon Building, 1321 Walnut Street

Cable Address "SEAWORTHY" PHILADELPHIA Telephone PENNYPACKER 8480

GEORGE G. SHARP

Naval Architect—Engineer

Marine Surveyor

30 Church Street New York City

Mercantile Marine Construction and Engineering

Design—Supervision—Survey

Tel. Cortland 5134 Cable SEACRAFT, New York

WILLIAM MORISON STEIN

Consulting Engineer and Marine Surveyor

306 Canton House, Baltimore, Md.

Reports, Opinions, Expert Testimony, Superintendence

Phones: Office, Calvert 5829. Residence, Hamilton 1024.

Cable Address: Terminal

Surveyor to Bureau Veritas

J. MURRAY WATTS

Member of Society of Naval Architects and Marine Engineers

136 South Fourth Street, Philadelphia, Penna.

Plans and specifications furnished for seagoing and inland waterway types of commercial vessels. Also for steam and sailing yachts and motor boats.

PHONE: LOMBARD 2072 CABLE ADDRESS: MURWAT

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

PROFESSIONAL DIRECTORY

Consulting and Marine Engineers—Naval Architects—Marine Surveyors—Patent Attorneys, Etc.

JOHN H. WELLS, INC.
Naval Architects—Marine Engineers
Diesel Engine Installations
Design—Construction
11 EAST 44th STREET NEW YORK CITY
Telephone—Murray Hill 3126-3127

YOUR PROFESSIONAL CARD

on this page will reach important ship building, ship repair and ship operating officials at a nominal cost

Ask us for details and rates

Positions Open **GET TOGETHER DEPARTMENT** Positions Wanted

EDUCATIONAL

TEXAS NAUTICAL ACADEMY
City Natl. Bank Bldg. Phone 1192 Galveston, Texas
Deck and Engine Personnel Instructed and Prepared for License Examination Including First Aid

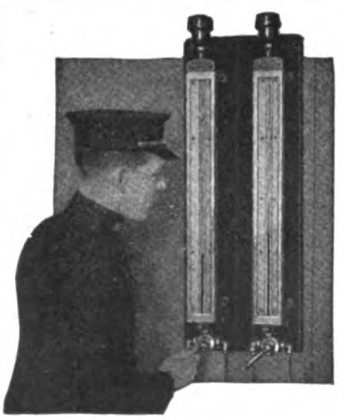
Stuart A. Johnson
Mech. and Marine Engineer
Private Instruction in Drawing and Slide Rule
Drawings and Designs of All Kinds Executed

Capt. Jas. E. Cameron
Magnetician
Compasses, Sextants and Barometers Repaired and Adjusted
Chronometers Repaired and Rated

Classified Advertisements—Help and Situation Wanted advertisements appearing in the "Get Together Department," 5c. a word an insertion. Minimum charge $1.00 for each insertion.

For sale advertisements $6.00 a column inch (1" by 3½" wide). Any number of inches may be used. Copy must be in this office by the 10th of each month preceding to insure insertion in the issue.

SEALED PROPOSALS will be opened by the Supt. of Lighthouses, Charleston, S. C., 12 o'clock noon, December 18, 1928, for two full diesel marine propelling engines, one electric motor driven air compressor, accessories and fittings for the Lighthouse Tender Palmetto. The specifications cover engines of approximately 82 to 85 H. P. and an air compressor of approximately 3 H. P. Information upon application.



Trade Mark Reg U.S.Pat.Off.
Pneumercator Tank Gauges

are accurate and reliable. They provide the modern means of centralizing the gauging of fuel oil tanks

Write for Catalog

PNEUMERCATOR COMPANY, INC.
40 Flatbush Ave. Extension, Brooklyn, N. Y.

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

BUYERS' DIRECTORY

Accessories, Boat
(See Boat Accessories)

Acetylene Apparatus
(See Oxy-Acetylene Welding and Cutting)

Acetylene Gas
Prest-O-Lite Co.

Acetylene, Dissolved
Prest-O-Lite Co.

Acetylene Generators
(See Generators, Acetylene)

Air Aftercoolers
Griscom-Russell Co.
Ingersoll-Rand Co.
Worthington Pump & Machinery Corp.

Air Chambers
National Tube Co.
Peabody Engineering Corp.
Worthington Pump & Machinery Corp.

Air Compressors
General Electric Co.
Hill Diesel Engine Co.
Ingersoll-Rand Co.
Worthington Pump & Machinery Corp.

Air Couplings
Cleveland Pneumatic Tool Co.
Ingersoll-Rand Co.
National Tube Co.

Air Drills
(See Pneumatic Tools)

Air Hammers
(See Pneumatic Tools)

Air Heaters
Foster Wheeler Corp.

Air Hoists
Ingersoll-Rand Co.

Air Hose
Cleveland Pneumatic Tool Co., The
Ingersoll-Rand Co.

Air Hose Fittings
Cleveland Pneumatic Tool Co.
Ingersoll-Rand Co.

Air Motors
Cleveland Pneumatic Tool Co.
Ingersoll-Rand Co.

Air Ports
Sands & Son Co., A. B.

Air Pumps
Davidson Co., M. T.
Ingersoll-Rand Co.
Warren Steam Pump Co.
Westinghouse Electric & Mfg. Co.
Wheeler Manufacturing Co.
Worthington Pump & Machinery Corp.

Air Pumps—Vertical Twin Beam
Davidson Co., M. T.
Warren Steam Pump Co.
Worthington Pump & Machinery Corp.

Air Separators
Griscom-Russell Co.
Western Engineering Co.

Air Signals & Whistles
Nord, Nils F.

Air Valves
Reading Steel Castings Co.

Airports, Patented
Kearfott Engineering Co.

Alarms
(See Water Gauges and Alarms)

Alternators
Fairbanks, Morse & Co.
Westinghouse Elect. & Mfg. Co.

Ammeters
(See Electrical Instruments)

Ammonia Fittings
Brunswick-Kroeschell Co.
Frick Company
York Ice Machinery Corp.

Ammonia Valves
Lunkenheimer Co., The
York Ice Machinery Corp.

Anchor Chains
(See Chains)

Anchor Trippers
American Engineering Co.

Anchors
Baldt Anchor Chain & Forge Co.
Kearfott Engineering Co.

Annunciators and Alarms
Kidde & Co., Inc., Walter

Antennae Wire
Roebling's Sons Co., J. A.

Anti-Rust Coatings
Wailes Dove-Hermiston Corp.

Arc Welding
(See Welding, Electric)

Ash Ejectors
Davidson Co., M. T.
Manitowoc Shipbuilding Corp., The

Ash Hoists
American Engineering Co.
Hyde Windlass Co.
Ingersoll-Rand Co.
Lidgerwood Manufacturing Co.

Asphalt Paint
Wailes Dove-Hermiston Corp.

Automatic Towing Machines
(See Towing Machines)

Babbitt Metal
Shonberg, Inc., I.

Back Pressure Valves
Griscom-Russell Co.

Bar Iron
Bethlehem Steel Co.
Reading Iron Co.

Barges
American Bridge Co.
Charleston Dry Dock & Machine Co.
Ellis Channel System of Steel Hull Construction
Manitowoc Shipbuilding Corp., The

Barge Derricks
Lidgerwood Manufacturing Co.

Base Covers, Cork, Composition Linoleum, Tile
Bonded Floors Co., Inc.

Batteries, Lighting
Electric Storage Battery Co.

Batteries, Radio
Electric Storage Battery Co.

Batteries, Storage
Electric Storage Battery Co.
Prest-O-Lite Co.

Bearings, Engine, Bronze
Shenango-Penn Mold Co.

Bearings, Shaft
Cooke Seal Ring
Goodrich Rubber Co., The B. F.

Belt Dressing
Dixon Crucible Co., Joseph

Belts
Goodrich Rubber Co., The B. F.

Bending Rolls
(See Rolls)

Bitts
American Engineering Co.
Hyde Windlass Co.

Bituminous Coatings
Wailes Dove-Hermiston Corp.

Blocks
(See Chain Hoists and Blocks; also Tackle Blocks)

Blowers
De Laval Steam Turbine Co.
Diehl Manufacturing Co.
General Electric Co.
Ingersoll-Rand Co.
Kearfott Engineering Co.
Sturtevant Co., B. F.
Westinghouse Electric & Mfg. Co.

Blowers, Soot
Diamond Power Specialty Corp.
Dixon Crucible Co., Joseph

Blow-Off Valves
(See Valves, Blow-Off)

Boat Accessories
Sands & Son Co., A. B.

Boat Builders
(See Shipbuilders)

Boats
(See Life Boats; also Launches and Yachts)

Boiler Feeders
(See Feed-Water Regulators)

Boiler Flue Cleaners
Diamond Power Specialty Co., The

Boiler Gage Glasses
(See Gage Glasses)

Boiler Graphite
Dixon Crucible Co., Joseph

Boiler Nozzles, Forged Steel
American Welding Co.

Boiler Nozzles, Welded Steel
American Spiral Pipe Works
American Welding Co.

Boiler Riveters
(See Pneumatic Riveters)

Boiler, Steam and Water Drums, Welded
American Welding Co.

Boiler Tubes, Charcoal
Reading Iron Co.

Boiler Tube Cleaners
Roto Co., The

Boiler Tubes
Kearfott Engineering Co.
National Tube Co.

Boiler Tubes, Charcoal
Bethlehem Steel Co.

Boilers
American Spiral Pipe Works
Babcock & Wilcox Co.
Bethlehem Shipbuilding Corp.
Charleston Dry Dock & Machine Co.
Hyde Windlass Co.
Kearfott Engineering Co.
Manitowoc Shipbuilding Corp., The

Boilers, Watertube
(See Boilers)

Books, Marine
Simmons-Boardman Pub. Co.

Booms—Tubular Steel
National Tube Co.

Boring Machines — Metal Working
Ingersoll-Rand Co.

Boring Machines—Wood
Cleveland Pneumatic Tool Co.
Ingersoll-Rand Co.

Brass Castings
(See Castings—Brass)

Breechings, Boiler
Griscom-Russell Co.

Brick
(See Fire Brick)

Bridge Control
Westinghouse Electric & Mfg. Co.

Bridge Walls
(See Furnace Bridge Walls)

Broilers, Electric.
Edison Electric Appliance Co.

Brokers
(See Ship Brokers)

Burners, Fuel Oil
(See Fuel Oil Burners)

Bushings, Bronze
Shonberg, Inc., I.

Cables and Accessories
Roebling's Sons Co., J. A.

Cableways
(See Marine Cableways)

Calking Machinery
Ingersoll-Rand Co.

Capstans (Steam, Electric, Hand)
American Engineering Co.
Bethlehem Steel Co.
Hyde Windlass Co.
Ingersoll-Rand Co.

Car Floats
American Bridge Co.
Ellis Channel System of Steel Hull Construction
Manitowoc Shipbuilding Corp., The
New York Shipbuilding Co.

Carbon Dioxide Valves and Fittings
Brunswick-Kroeschell Co.
Frick Company
York Ice Machinery Corp.

Carbon Dioxide Machines
Brunswick-Kroeschell Co.
Frick Company
York Ice Machinery Corp.

Cargo Hoists
(See Hoisting Engines)

Cargo Lights
General Electric Co.
Westinghouse Electric & Mfg. Co.

Cargo Winches
(See Winches)

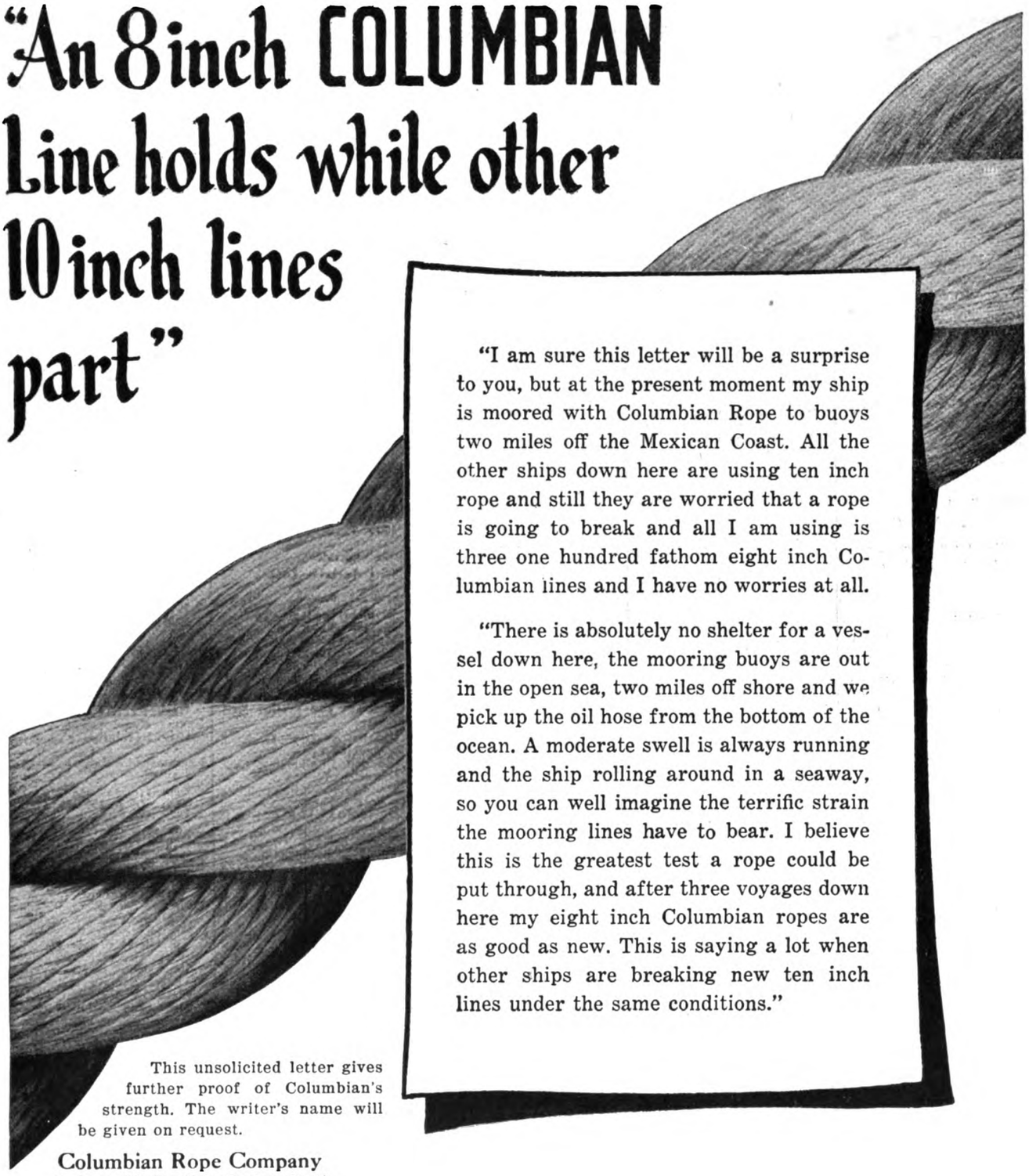
Castings—Aluminum
Capstaff Hunter Turbine Wks.
Griscom-Russell Co.
Hyde Windlass Co.
Sands & Son Co., A. B.

Castings—Brass
Bethlehem Steel Co.
Capstaff Hunter Turbine Wks.
Charleston Dry Dock & Machine Co.
Griscom-Russell Co.
Hyde Windlass Co.
Manitowoc Shipbuilding Corp., The
Sands & Son Co., A. B.

Castings—Bronze
Bethlehem Steel Co.
Capstaff Hunter Turbine Wks.
Charleston Dry Dock & Machine Co.
Griscom-Russell Co.
Kearfott Engineering Co.
Manitowoc Shipbuilding Corp., The
Sands & Son Co., A. B.

Generated on 2024-09-12 14:25 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

"An 8 inch COLUMBIAN Line holds while other 10 inch lines part"



"I am sure this letter will be a surprise to you, but at the present moment my ship is moored with Columbian Rope to buoys two miles off the Mexican Coast. All the other ships down here are using ten inch rope and still they are worried that a rope is going to break and all I am using is three one hundred fathom eight inch Columbian lines and I have no worries at all.

"There is absolutely no shelter for a vessel down here, the mooring buoys are out in the open sea, two miles off shore and we pick up the oil hose from the bottom of the ocean. A moderate swell is always running and the ship rolling around in a seaway, so you can well imagine the terrific strain the mooring lines have to bear. I believe this is the greatest test a rope could be put through, and after three voyages down here my eight inch Columbian ropes are as good as new. This is saying a lot when other ships are breaking new ten inch lines under the same conditions."

This unsolicited letter gives further proof of Columbian's strength. The writer's name will be given on request.

Columbian Rope Company
Auburn, N. Y. *"The Cordage City"*

COLUMBIAN TAPE MARKED PURE MANILA ROPE

Generated on 2024-09-12 14:49 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Castings—Grey Iron
Bethlehem Steel Co.
Capstaff Hunter Turbine Wks.
Fulton Iron Works
Kearfott Engineering Co.

Castings, Malleable
Capstaff Hunter Turbine Wks.
Reading Steel Castings Co.

Castings—Steel
Bethlehem Steel Co.
Capstaff Hunter Turbine Wks.
Hyde-Windlass Co.
Newport News Dry Dock & Shipbuilding Co.
Reading Steel Castings Co.
Sands & Son Co., A. B.

Cement Linoleum
Bonded Floors Co., Inc.

Cement, Iron
Smooth-On Mfg. Co.

Cement, Steel
Smooth-On Mfg. Co.

Centrifugal Oil Purifiers
De Laval Separator Co.
Sharples Specialty Co.

Centrifugal Pumps
(See Pumps, Centrifugal)

Chain
Baldt Anchor Chain & Forge Co.
Kearfott Engineering Co.
National Malleable & Steel Castings Co.

Chain Pipe Wrenches
American Engineering Co.

Chain Stoppers
American Engineering Co.

Charcoal Iron Boiler Tubes
Bethlehem Steel Co.
Kearfott Engineering Co.

Check Valves — Brass and Iron
(See Valves, Check)

Chemicals
Oakite Products, Inc.

Chipping Hammers
(See Pneumatic Tools)

Chisel Blanks
Cleveland Pneumatic Tool Co., The
Cleveland Steel Tool Co.
Ingersoll-Rand Co.

Chocks
American Engineering Co.
Manitowoc Shipbuilding Corp., The

Circulating Pumps
(See Pumps, Circulating)

Clarifiers, Oil
De Laval Separator Co.
Sharples Specialty Co., The

Cleaning Materials
Oakite Products, Inc.

Clutches—Engine—Friction
Bessemer Gas Engine Co.

Clutches—Engine—Reverse
Bessemer Gas Engine Co.

Coal-Handling Machinery
Lidgerwood Mfg. Co.

Coal Pulverizers
Foster Wheeler Corp.

Coatings
(See Anti-Rust Coatings)

Cocks
(See Gage Cocks)

Coils, Pipe (Copper)
Griscom-Russell Co.

Combined Air and Circulating Pumps
Ingersoll-Rand Co.
Wheeler Mfg. Co., C. H.
Worthington Pump & Machinery Corp.

Companion Flanges
(See Flanges, Companion)

Compasses
Sperry Gyroscope Co.

Compensators, Motor Starting
Fairbanks-Morse & Co.

Compositions
(See Ship's Compositions)

Compounds, Cleaning
Oakite Products, Inc

Compression Dies
(See Dies, Compression)

Compression Riveters
(See Pneumatic Riveters)

Condenser Packers
Blain & Co.

Condenser Tube and Ferrules, Seamless Cold Drawn
Davidson Co., M. T.
Davis Engineering Corp.
Griscom-Russell Co.
Kearfott Engineering Co.
Shonberg, Inc., I.
Warren Steam Pump Co.
Westinghouse Electric & Mfg. Co.
Wheeler Mfg. Co., C. H.

Condenser Tubes
Kearfott Engineering Co.

Condensers
American Engineering Co.
Capstaff Hunter Turbine Wks.
Cooke Seal Ring
Foster Wheeler Corp.
Griscom-Russell Co.
Ingersoll-Rand Co.
Westinghouse Elect. & Mfg. Co.
Worthington Pump & Machinery Corp.

Construction, Steel
Bethlehem Steel Co.
Ellis Channel System of Steel Hull Construction

Consulting Engineers
(See Engineers, Consulting)

Controllers, Electric
Fairbanks-Morse & Co.

Conveying Machinery
Lidgerwood Mfg. Co.

Conveyors, Coal
(See Conveying Machinery)

Coolers — Air, Atmospheric, Gasoline, Oil
Griscom-Russell Co.

Coolers, Engine Jacket Water
Griscom-Russell Co.

Copper
(See Brass and Copper)

Cordage
(Also see Rope and Wire Rope; also Twine)
Columbian Rope Co.
Griscom-Russell Co.

Coupling Nuts
Cleveland Steel Tool Co.

Couplings
(See Hose Couplings)

Couplings, Pipe
Dart Mfg. Co.

Cranes
American Engineering Co.

Cutting and Welding
(See Welding)

Cylinder Oil
Standard Oil Co. of N. J.
Texas Co., The
Vacuum Oil Co.

Cylinder Relief Valves
(See Valves)

Cylinders for Compressed Air, Gas, Etc.
American Welding Co.
National Tube Co.

Deck Fittings, Bronze
Getty & Co., Inc., H. S.

Deck Plates
Sands & Co., A. B.

Deck Pumps
Nash Engineering Co.

Deck Swabbing Materials
Oakite Products, Inc.

Decking
Lidgerwood Mfg. Co.

Derrick Irons
Lidgerwood Mfg. Co.

Derricks
Lidgerwood Mfg. Co.

Detectors, Elect. Salinity
Babcock & Wilcox Co.

Detergents (Laundry)
Oakite Products, Inc.

Dies, Boiler Maker
Cleveland Steel Tool Co.

Dies, Compression
Cleveland Steel Tool Co.

Diaphragm Pumps
Hyde Windlass Co.

Direct-Connected Sets
(See Electric Plants)

Distilling
(See Evaporators)

Doors, Bunker
Jamison Cold Storage Door Co.

Doors, Cold Storage
Jamison Cold Storage Door Co.

Doors, Cooler
Jamison Cold Storage Door Co.

Doors, Freezer
Jamison Cold Storage Door Co.

Doors, Vestibule
Jamison Cold Storage Door Co.

Draft Gauges
Peabody Engineering Corp.

Dredges
New York Shipbuilding Co.

Dredging Machinery
American Engineering Co.
Lidgerwood Mfg. Co.
Westinghouse Electric & Mfg. Co.

Dredging Pumps
Ingersoll-Rand Co.
Worthington Pump & Machinery Corp.

Drills, Electric
(See Electric Drills)

Drills, Pneumatic
(See Pneumatic Tools)

Drills, Portable
(See Portable Drills)

Dry Dock Pumps
Bethlehem Steel Co.
Ingersoll-Rand Co.
Worthington Pump & Machinery Corp.

Dry Dock Supplies
Topping Brothers.

Dry Docks and Marine Railways
Charleston Dry Dock & Machine Co.
Crandall Engineering Co.
Donnelly, Wm. T.
Manitowoc Shipbuilding Corp., The
Morse Dry Dock & Repair Co.
Newport News Dry Dock & Shipbuilding Co.
Rohde & Sons Co., Chas. L.
Sun Shipbuilding & Dry Dock Co.
Todd Shipyards Corp.

Dynamometers
General Electric Co.
Wheeler Mfg. Co., C. H.

Dynamos
(See Electric Plants)

Educational Course
Texas Nautical Academy.

Economizer, Fuel, and Feed Water
Foster-Wheeler Corp.
Griscom-Russell Co.
Sturtevant Co., The B. F.

Ejectors
Westinghouse Elect. & Mfg. Co.

Electric Broilers
Edison Electric Appliance Co.

Electric Cranes
(See Electric Hoists)

Electric Cutouts
Colts Patent Fire Arms Co.

Electric Equipment
Kidde & Co., Inc., Walter

Electric Freight Tracks
(See Freight-Handling Equipment)

Electric Griddles
Edison Electric Appliance Co.

Electric Heaters
Kidde & Co., Inc., Walter
Westinghouse Electric & Mfg. Co.

Electric Hoists
American Engineering Co.
General Electric Co.

Electric Lighting
Engberg's Elect. & Mech. Works.
General Electric Co.
Hill Diesel Engine Co.
Westinghouse Electric & Mfg. Co.

Electric Plants
Engberg's Elect. & Mech. Works.
Hill Diesel Engine Co.
Kearfott Engineering Co.
Westinghouse Electric & Mfg. Co.

Electric Pumps
(See Electric Driven Pumps)

Electrical Instruments
Westinghouse Electric & Mfg. Co.
Weston Electrical Instrument Co.

Electrical Fixtures
Topping Brothers.

Engine Generating Sets
Engberg's Elect. & Mech. Works.
Hill Diesel Engine Co.
Westinghouse Electric & Mfg. Co.

Engine Oil
(See Lubricants)

Engine Room Bilge Pumps
Nash Engineering Co.

Engine Room Counters
(See Revolution Counters)

Engineers, Consulting — Marine
Bath Iron Works
Chapman & Co., O. C.
Crandall Engineering Co.
Cox & Stevens
Donnelly, Wm. T.
Dyson, Chas. W.
Ewertz, Eric H.
Farley & Co., Edwin P.
Ferris, Theodore
Ford, Louis B.
McQuilling, T. A.
Morrell, Rob't W.
Hill Diesel Engine Co.
Sharp, Geo. G.
Stein, Wm. Morrison
Thaver, Horace H.
Watts, J. Murray
Wells, Inc., John H.

Engines for Auxiliaries
Bethlehem Steel Co.
De Laval Steam Turbine Co.
Engberg's Elect. & Mech. Works.
General Electric Co.
Hill Diesel Engine Co.
Hyde Windlass Co.
Kearfott Engineering Co.
McIntosh & Seymour Corp.
Westinghouse Electric & Mfg. Co.

Engines, Diesel
Bessemer Gas Engine Co.
Bethlehem Steel Co.
Busch-Sulzer Bros.-Diesel Engine Co.
Fairbanks-Morse & Co.
Fulton Iron Works
Hill Diesel Engine Co.
Lombard Governor Co., The
McIntosh & Seymour Corp.
New London Ship & Engine Co.
Treiber Diesel Engine Corp.
Winton Engine Co., The
Worthington Pump & Machinery Corp.

Generated on 2024-09-12 14:49 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Commander Byrd's 'City of New York' is "*Getting Wonderful Results from Diamond Soot Blowers*"

DIAMOND POWER SPECIALTY CORPORATION
DETROIT, MICHIGAN.

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Engines, Gas
Bessemer Gas Engine Co.
Hill Diesel Engine Co.
Ingersoll-Rand Co.
Worthington Pump & Machinery Corp.

Engines, Gasoline
Fairbanks-Morse & Co.
Sturtevant Co., The B. F.
Winton Engine Co.

Engines, Hoisting
American Engineering Co.
Fairbanks-Morse & Co.
Hill Diesel Engine Co.
Hyde Windlass Co.
Lidgerwood Mfg. Co.

Engines, Kerosene
Fairbanks-Morse & Co.
Hill Diesel Engine Co.

Engines, Mooring
Manitowoc Shipbuilding Corp., The.

Engines, Oil
(Also see Diesel Engines)
Bessemer Gas Engine Co.
Bethlehem Steel Co.
Busch-Sulzer Bros.-Diesel Engine Co., W.
Fairbanks-Morse & Co.
Hill Diesel Engine Co.
Ingersoll-Rand Co.
Lombard Governor Co., The
McIntosh & Seymour Corp.
New London Ship & Engine Co.
Winton Engine Co., The
Worthington Pump & Machinery Corp.

Engines, Pleasure Boat
Bessemer Gas Engine Co.

Engines, Propelling
Bessemer Gas Engine Co.
Bethlehem Shipbuilding Corp.
Bethlehem Steel Co.
Busch-Sulzer Bros.-Diesel Engine Co.
Hill Diesel Engine Co.
Ingersoll-Rand Co.
McIntosh & Seymour Corp.
Manitowoc Shipbuilding Corp., The
Winton Engine Co.
Worthington Pump & Machinery Corp.

Engines, Pumping
Davidson Co., M. T.
Griscom-Russell Co.
Hill Diesel Engine Co.
Ingersoll-Rand Co.
Kearfott Engineering Co.
Worthington Pump & Machinery Corp.

Engines, Steam
Bethlehem Steel Co.
Engberg's Elect. & Mech. Works.
Manitowoc Shipbuilding Corp., The

Engines, Steering
See Steering Engines

Engines, Vertical Steam
Bethlehem Steel Co.

Engine-Room Supplies
(See Steam Specialties)

Evaporators
American Engineering Co.
Bethlehem Steel Co.
Davidson Co., M. T.
Foster Wheeler Corp.
Griscom-Russell Co.
Kearfott Engineering Co.

Expansion Joints
Foster Wheeler Corp. Co.
Griscom-Russell Co.

Extractors, Oil, Grease
Griscom-Russell Co.

Fans, Bracket
Westinghouse Elec. & Mfg. Co.

Fans, Exhaust
Diehl Manufacturing Co.
Westinghouse Elec. & Mfg. Co.

Feed Water Heaters
Bethlehem Steel Co.
Foster Wheeler Corp.
Griscom-Russell Co.
Kearfott Engineering Co.
Westinghouse Elect. & Mfg. Co.
Worthington Pump & Machinery Corp.

Feed Water Regulators
Atlas Valve Co.
Chaplin-Fulton Mfg. Co.

Filters, Aerating
Jerguson Gage & Valve Co.

Filters, Feed Water
Griscom-Russell Co.

Filters—Marine Oil
Griscom-Russell Co.

Fire Alarm Systems
Kidde & Co., Inc., Walter

Fire Extinguishing Systems
American LaFrance Foamite Corp.
Kidde & Co., Inc., Walter

Fire Dept. Supplies
Kidde & Co., Inc., Walter

Fire Hose
(See Hose)

Fire Protection Systems
American LaFrance Foamite Corp.
Kidde & Co., Inc., Walter

Fittings, Boiler Room
Jerguson Gage & Valve Co.
Kearfott Engineering Co.
Lunkenheimer Co., The

Fittings Brass
Lunkenheimer Co., The
Sands & Son Co., A. B.

Fittings, Cast Steel
Bethlehem Steel Co.
Reading Steel Castings Co.

Fittings, Gas Fixture
Dart Mfg. Co.

Fittings, Hydraulic
Reading Steel Castings Co.

Fittings, Steel.
Reading Steel Castings Co.

Fixtures, Plumbing
Sands & Son Co., A. B.

Flanges, Companion
Reading Steel Castings Co.

Flanges, Pipe
American Spiral Pipe Works
Dart Mfg. Co.

Flanges, Steel
American Spiral Pipe Works
Reading Steel Castings Co.

Floating Dry Docks
(See Dry Docks)

Floor Plates
(See Plates, Steel Floor)

Flooring, Cork, Composition, Linoleum, Tile
Bonded Floors Co., Inc.,

Flue Cleaners
(See Boiler Flue Cleaners)

Frog Horns
(See Whistles Fog)

Forced Draft
(See also Blowers)
De Laval Steam Turbine Co.
General Electric Co.
Kearfott Engineering Co.
Sturtevant Co., The B. F.
Westinghouse Elec. & Mfg. Co.

Forgings
Newport News Dry Dock & Shipbuilding Co.

Forgings, Bronze
Hyde Windlass Co.

Forgings, Iron and Steel
Bethlehem Steel Co.
Capstaff Hunter Turbine Wks.
Griscom-Russell Co.
Charleston Dry Dock & Machine Co.
Skodaworks

Freight-Handling Equipment
General Electric Co.
Lidgerwood Mfg. Co.
Westinghouse Elec. & Mfg. Co.

Fresh Water Service Pumps
Nash Engineering Co.

Fuel Oil Burners
Babcock & Wilcox Co.
Bethlehem Shipbuilding Corp., Ltd.
Coen Co.
Morse Dry Dock & Repair Co.
Peabody Engineering Corp.
Ray Mfg. Co., W. S.

Fuel Oil (Diesel)
Standard Oil Co. of N. J

Fuel Oil Heaters
Bethlehem Steel Co.
Coen Co.
Griscom-Russell Co.

Furnace Bridge Walls
Kearfott Engineering Co.

Furnaces, Corrugated
American Spiral Pipe Works
American Welding Co.

Furnace, Doors.
American Welding Co.

Furnace, Fronts.
American Welding Co.

Fuses
Colts Patent Fire Arms Mfg. Co.

Fusible Plugs
Griscom-Russell Co.
Lunkenheimer Co., The
Shonberg Co., Inc.

Gage Cocks
Jerguson Gage & Valve Co.
Lunkenheimer Co., The
Sands & Son Co., A. B.

Gage Glasses
Jenkins Brothers
Lunkenheimer Co., The
Jerguson Gage & Valve Co.

Gages, Draft
Peabody Engineering Corp.
Pneumercator Co.

Gages, Reflex Water
Jerguson Gage & Valve Co.

Gages, Vacuum
Taylor Instrument Co.

Gas Engine Specialties
Lunkenheimer Co., The

Gaskets, Copper and Steel
(Also see packing)
American Spiral Pipe Works
Griscom-Russell Co.

Gaskets, Metallic
Smooth-On Mfg. Co.

Gear Lubricants
Cook's Sons Inc., Adam

Gears
De Laval Steam Turbine Co.
General Electric Co.
Sturtevant Co., The B. F.
Westinghouse Electric & Mfg. Co.

Gears, Worm Reduction
De Laval Steam Turbine Co.

General Welding and Cutting Equipment
(See Welding and Cutting Apparatus and Supplies)

Generating Sets
Engberg's Elect. & Mech. Works.
Fairbanks-Morse & Co.
General Electric Co.
Hill Diesel Engine Co.
Kearfott Engineering Co.
Sturtevant Co., The B. F.
Westinghouse Electric & Mfg. Co.
Worthington Pump & Machinery Corp.

Generating Sets, Diesel Electric
Hill Diesel Engine Co.

Generators
Diehl Manufacturing Co.
Engberg's Elec. & Mech. Works.
Fairbanks-Morse & Co.
Griscom-Russell Co.
Hill Diesel Engine Co.
Westinghouse Elec. & Mfg. Co.

Generators, Turbine
Kearfott Engineering Co.
Westinghouse Elect. & Mfg. Co.

Governors, Pump
Atlas Valve Co.
Chaplin-Fulton Mfg. Co.

Graphite, Flake
Dixon Crucible Co., Joseph

Graphite, Grease
Dixon Crucible Co., Joseph

Graphite, Paint
Dixon Crucible Co., Joseph

Grate Bars
Kearfott Engineering Co.

Grease
Cook's Sons Inc., Adam

Grease Cups
Lunkenheimer Co., The

Grease Extractors
Griscom-Russell Co.

Grinders—Electric and Pneumatic
Cleveland Pneumatic Tool Co., The
Ingersoll-Rand Co.

Griddles, Electric
Edison Electric Appliance Co.

Gypseys
American Engineering Co.
Hyde Windlass Co.
Lidgerwood Mfg. Co.

Gyro-Compass
Sperry Gyroscope Co.

Gyro-Pilot
Sperry Gyroscope Co.

Hammers, Pneumatic
(See Pneumatic Tools)

Hardware, Deck & Cabin
Getty & Co. Inc., H. S.
Topping Brothers.

Hardwood
(See Lumber)

Hawser Pipes
Kearfott Engineering Co.

Hawsers—Manila
(Also see Rope and Wire Rope)
Columbian Rope Co.

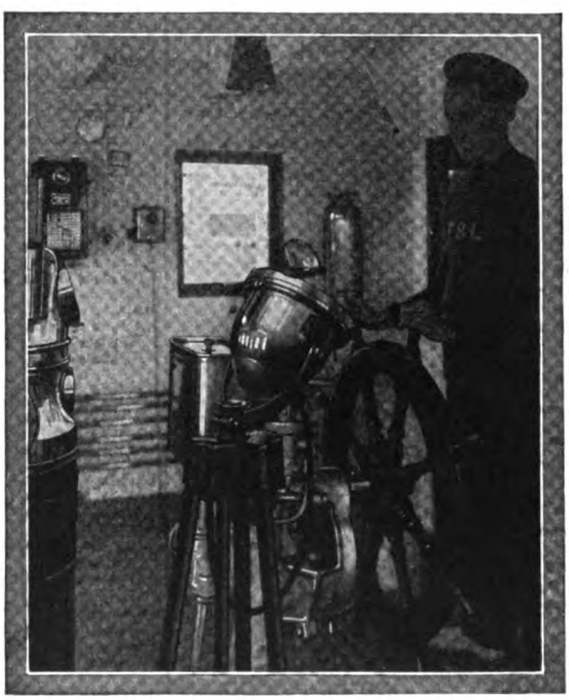
Generated on 2024-09-12 14:20 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

The Ship's Continuous Guide Is Its Compass

THERE is no substitute for the compass, it is in constant use while the vessel is under way. Other navigational equipment provides means for confirming the vessel's position from time to time, but **the compass is the foundation of all navigational work.** Because of its importance there can be no compromise — it must be the best. That is why 112 of the World's Merchant Fleets and the leading Navies of the World use Sperry Gyro-Compasses.

The directive force, or power to seek and hold the meridian, of the Sperry Gyro-Compass is 150 times that of the magnetic compass. This great directive power is obtained from natural laws which give TRUE NORTH indications. The danger of error by having to use mathematical formulas to convert compass readings to "TRUE" is thus avoided. The Sperry Gyro-Compass also operates indicating compasses, called "Repeaters," for steering, taking bearings, aiding in obtaining accurate radio bearings, recording the vessel's course and even steering the ship.

The navigational equipment of a ship is not complete without the Sperry Gyro-Compass.



The Sperry Gyro-Compass

1. Develops 150 times the directive force of the standard 7½" card, magnetic compass.
2. Gives TRUE NORTH readings directly. There is, therefore, no need of employing mathematical formulas to convert its reading to TRUE.
3. Provides better steering because of its instantaneous indications of any movement of the ship's head from the course.
4. Provides means for taking accurate bearings, both direct and by radio, quickly and without calculation.
5. Records the vessel's course.
6. And even steers the ship through the aid of the Gyro-Pilot.

Steering the S.S. Fort Victoria. Here, as on ships of 111 other fleets, the Sperry Gyro-Compass serves in the important capacity of guiding the ship on her course as recorded on the Course Recorder in the left background.

THE SPERRY GYROSCOPE COMPANY

BROOKLYN NEW YORK
CLEVELAND PHILADELPHIA SEATTLE LOS ANGELES SAN FRANCISCO

Generated on 2024-09-12 15:01 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Heaters (Bath, Lavatory Shower etc.)
Griscom-Russell Co.
Sturtevant Co., The B. F.
Sands & Son Co., A. B.

Heaters, Electric
(See Electric Heaters)

Heaters, Fuel Oil
(See Fuel Oil)

Heating Tables, Elec
Edison Electric Appliance Co.

Hemp
(See Twine)

Hoisting Engines
American Engineering Co.
Hill Diesel Engine Co.
Hyde Windlass Co.
Lidgerwood Mfg. Co.

Hoisting and Transmission Rope
(See Rope)

Hoists
Ingersoll-Rand Co.

Hoists, Electric
American Engineering Co.
Hyde Windlass Co.
Lidgerwood Mfg. Co.
Westinghouse Elec. & Mfg. Co.

Holders-On
Ingersoll-Rand Co.

Horizontal Punches
Cleveland Punch & Shear Works Co.

Hose
Cleveland Pneumatic Tool Co., The
Goodrich Rubber Co., The B. F.
Ingersoll-Rand Co.

Hose Coupling
Cleveland Pneumatic Tool Co., The
Ingersoll-Rand Co.

Hull Steel
Ellis Channel System of Steel Hull Construction

Humidifiers
Griscom-Russell Co.

Hydraulic Fittings
(See Fittings, Hydraulic)

Hydraulic Presses and Other Machinery
Warren Steam Pump Co.

Hydrometers
Taylor Instrument Co.

Hydrostats
Atlas Valve Co.

Ice Machines
(See Refrigerating Machinery)

Intercoolers
Griscom-Russell Co.

Interlocking Rubber Tiling
Griscom-Russell Co.

Iron, Cements
Smooth-On Mfg. Co.

Iron, Chain
Burden Iron Co.

Iron, Foundry Cements
Smooth-On Mfg. Co.

Iron Pipe
(See Pipe)

Iron, Refined
Burden Iron Co.

Iron, Staybolt
Burden Iron Co.

Jacks—Steamboat (Rachet Pulling)
Griscom-Russell Co.

Jointings
Walker & Co., Ltd., James

Journal Bearings
(See Thrust Bearings)

Jute
Columbian Rope Co.

Kerosene Engines
Hill Diesel Engine Co.

Lamps
General Electric Co.

Lamps, Signals and Fixtures
Westinghouse Electric & Mfg. Co.

Launches
(See Shipbuilders)

Lead, White, Red
National Lead Co.

Lighters, Steam or Diesel
New York Shipbuilding Co.

Lights, Electric
(See Electric Lights)

Lights, Emergency Electric
Electric Storage Battery Co.

Lines—Towing, Buoy
(See Rope)

Linoleums
Bonded Floors Co., Inc.

Loading and Unloading Equipment
(See Freight-Handling Equipment)

Locomotive Cranes
(See Cranes)

Lubricants, Oil and Grease
Cook's Sons Inc., Adam
Standard Oil Co. of N. J.
Texas Co., The
Vacuum Oil Co.

Lubricating Oil Service Pumps
Nash Engineering Co.

Lubricating Oil Transfer Pumps
Nash Engineering Co.

Lubricators
Griscom-Russell Co.
Lunkenheimer Co.

Lumber
McKenna Co., Inc., J. F.

Machine Tools
Cleveland Pneumatic Tool Co.

Machine Work
Fulton Iron Works

Machinery, Marine
Bethlehem Steel Co.
Manitowoc Shipbuilding Corp., The

Manganese Bronze Castings
Bethlehem Steel Co.
Griscom-Russell Co.
Hyde Windlass Co.

Manila and Sisal Rope
(See Rope)

Manifolds
Cleveland Pneumatic Tool Co.
Ingersoll-Rand Co.

Marine Boilers
Manitowoc Shipbuilding Corp.

Marine Cableways
Lidgerwood Mfg. Co.

Marine Coatings
(See Anti-Rust Coatings)

Marine Decking
(See Decking)

Marine Engines
(See Engines, Propelling)

Marine Engineers
(See Engineers, Consulting)

Marine Forgings
(See Forgings)

Marine Heaters
(See Heaters)

Marine Paint
Wailes Dove-Hermiston Corp.

Marine Planing
Sands & Co., A. B.

Marine Railways
(See Dry Docks)

Marine Refrigeration
(See Refrigerating Machinery)

Marine Ranges
(See Ranges, Galley)

Marine Repairs
(See Repairs, Marine, also Shipbuilders)

Marine Shafting
(See Shafting)

Marine Superheaters
Babcock & Wilcox Co.
Foster Wheeler Corp.

Marine Wiring Devices
General Electric Co.
Westinghouse Elec. & Mfg. Co.

Mast Arm Rope
Roebling's Sons Co., J. A.

Masts, Tubular Steel
National Tube Co.

Metal Cleaner
Oakite Products, Inc.

Metal Protection, Paints
(See Paints, Metal Protection)

Meters, Electric
General Electric Co.

Meters, Oil and Water
Worthington Pump & Machinery Corp.

Mooring Engines
American Engineering Co.
Hyde Windlass Co.
Lidgerwood Mfg. Co.

Mooring Lines
Roebling's Sons Co., J. A.

Motor Boats
(See Shipbuilders)

Motor Boat Supplies
General Electric Co.

Motors, Electric
Diehl Manufacturing Co.
Engberg's Elect. & Mech. Works.
Fairbanks-Morse & Co.
Sturtevant Co., The B. F.
Westinghouse Elec. & Mfg. Co.

Motors, Gasoline
(See Gasoline Engines)

Mufflers
Maxim Silencer Co., The

Multiwhirl Oil Coolers
Griscom-Russell Co.

Nails, Cut
Bethlehem Steel Co.
Reading Iron Co.

Naval Architects
Chapman & Co., O. C.
Cox & Stevens
Donnelly, Wm. T.
Dyson, Chas. W.
Ewertz, Eric H.
Farley & Co., Edward P.
Ferris, Theodore
Ford, Louis B.
Morrell, Robt. W.
Nord, Niles F.
Rossell, Horace H.
Sharp, Geo. G.
Watts, J. Murray
Wells, Inc., John H.

Navigation Instruments
Sperry Gyroscope Co.

Needle Valves
(See Valves)

Nipples
Lunkenheimer Co.

Nitrogen Gas
Linde Air Products Co.

Nozzle, Acetylene
(See Acetylene Nozzle)

Nozzles
(See Hose Nozzles)

Oakum
Stratford Oakum Co., Geo.

Oil Burners, Fuel
(See Fuel Oil Burners)

Oil Burning Equipment
Bethlehem Shipbldg. Corp.
Coen Co., Inc.
Morse Dry Docks & Repair Co.
Peabody Engineering Corp.
Ray Mfg. Co., W. S.

Oil Clarifiers
(See Clarifiers, Oil)

Oil Coolers
Griscom-Russell Co.

Oil Cups
Griscom-Russell Co.
Lunkenheimer Co.

Oil, Cylinder
Vacuum Oil Co.

Oil Engine Generating Sets
Fairbanks-Morse & Co.
Hill Diesel Engine Co.

Oil Engines
(See Engines, Oil)

Oil, Fuel
Standard Oil Co. of N. J.
Texas Co., The

Oil Fuel Apparatus
(See Oil-Burning Equipment)

Oil Gages
Lunkenheimer Co., The

Oil Heaters and Coolers
Griscom-Russell Co.

Oil, Linseed
National Lead Co.

Oil Lubricating
Standard Oil Co. of N. J.
Texas Co., The
Vacuum Oil Co.

Oil Purifiers
(See Purifiers, Oil)

Oil Strainers
Coen Co.

Oiling Systems
(Also see Lubricators)
Lunkenheimer Co., The

Ore-Handling Machinery
(See Coal-Handling Machinery)

Ovens, Baking Electric
Edison Electric Appliance Co.
Westinghouse Elec. & Mfg. Co.

Ovens, Electric, Portable
Edison Electric Appliance Co.

Ovens, Warming
Edison Electric Appliance Co.

Oxy-Acetylene Welding & Cutting
Prest-O-Lite Co.

Oxygen Gas
Linde Air Products Co.

Packing Acid, Ammonia, Brine
Alfit Mfg. Co., Inc.
Crane Packing Co.

Packing, Asbestos
Colts Patent Fire Arms Mfg. Co.
Walker & Co., Ltd., James

Packing Gasoline
Alfit Mfg. Co.
Crane Packing Co.

Packing, H. P.
Crane Packing Co.
Walker & Co., Ltd., James

Packing, Iron
Smooth-On Mfg. Co.

Packing, Marine
Alfit Mfg. Co.
Cooke Seal Ring
Crane Packing Co.
Quaker City Rubber Co.

Packing Metallic
Alfit Mfg. Co., Inc.
Crane Packing Co.

Packing Oil
Alfit Mfg. Co., Inc.
Crane Packing Co.

Packing Piston, Plunger
Alfit Mfg. Co., Inc.
Crane Packing Co.

Packing, Red
Alfit Mfg. Co., Inc.
Crane Packing Co.
Walker & Co., Ltd., James

Packing Semi Metallic
Crane Packing Co.
Walker & Co., Ltd., James

Packing Superheated Steam
Alfit Mfg. Co., Inc.
Crane Packing Co.

Packing Tar
Alfit Mfg. Co., Inc.
Crane Packing Co.

Packing Valve
Alfit Mfg. Co., Inc.
Crane Packing Co.

Paint Cleaning and Removing Materials
Oakite Products Inc.

Paint Metal Protection
National Lead Co.
Wailes Dove-Hermiston Corp.

Phosphor Bronze Castings
Bethlehem Steel Co.

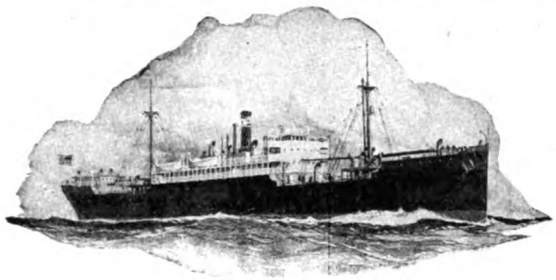
Pile Drivers
Griscom-Russell Co.
Mfg. Co.
Hyde Windlass Co.
Ingersoll-Rand Co.
Lidgerwood Mfg. Co.

Pilot House Control, Electric
General Electric Co.
Westinghouse Elec. & Mfg. Co.

Pipe
American Spiral Pipe Works
National Tube Co.

Generated on 2024-09-12 14:49 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

WORLD-WIDE FREIGHT SERVICES *that help* YOUR EXPORT TRADE



THE fact that they sail under the American flag—reach ports in all parts of the world—carry their cargoes safely and promptly to their destinations—and are under the direction of experienced American operators whose advice has proven very helpful—has made the freight services operated for the United States Shipping Board an important factor in the expansion and enlargement of the export trade of progressive American shippers.

Specify American ships for your foreign trade—there are 256 of them comprising 22 lines and they sail from Atlantic Coast and Gulf Ports to ports in the United Kingdom, Irish Free State, Continental Europe, South America, the Orient, Dutch East Indies, Australasia, India and Africa—as a matter of fact, to all parts of the world.

***AMERICA FRANCE LINE**
Cosmopolitan Shipping Co., Inc.
42 Broadway, New York City
North Atlantic to French ports

***AMERICAN BRAZIL LINE**
Colombian Steamship Co., Inc.
17 Battery Place, New York City
Monthly sailings from Philadelphia, New York, Savannah and Jacksonville to ports in Northern Brazil

AMERICAN DIAMOND LINES
Black Diamond S. S. Corp.
67 Exchange Place, New York City
North Atlantic ports to Rotterdam, Holland, and Antwerp, Belgium

DIXIE UK LINE
Dixie Steamship Co.
Whitney Central Bank Bldg.
New Orleans, La.
New Orleans to United Kingdom

DIXIE MEDIT. LINE
Dixie Steamship Co.
Whitney Central Bank Bldg.
New Orleans, La.
New Orleans to Mediterranean ports

***ATL. AUSTRALIAN LINE**
Roosevelt S. S. Co., Inc.
11 Broadway, New York City
New York to Australian ports

***AMERICAN INDIA LINE**
Roosevelt S. S. Co., Inc.
11 Broadway, New York City
North Atlantic ports to Indian ports

Periodically the above two lines combine on an around the world service via the Suez Canal.

AMER. MERCHANT LINES
J. H. Winchester & Co., Inc.
17 Battery Place, New York City
Passenger and freight services to United Kingdom ports

GULF BRAZIL RIVER PLATE LINE
Mississippi Shipping Co., Inc.
Hibernia Bank Bldg.
New Orleans, La.
Gulf ports to Brazil and River Plate ports, east coast of South America

MISSISSIPPI VALLEY EUROPEAN LINE
Mississippi Shipping Co., Inc.
Hibernia Bank Building
New Orleans, La.
New Orleans to French Atlantic and Belgian ports

MOBILE OCEANIC LINE
Waterman S. S. Corp.
Mobile, Ala.
Mobile and Eastern Gulf ports to United Kingdom and continental European ports

GULF WEST MEDIT. LINE
Tampa Interocean S. S. Co.
917 Whitney Building
New Orleans, La.
Gulf and South Atlantic ports to Portuguese, Spanish, and North African ports (west of Bizerta)

AMERICAN PIONEER LINE (Atlantic Division)
Roosevelt S. S. Co.
11 Broadway, New York City
N. Atl. ports to Orient and Dutch E. I.

AMERICAN PIONEER LINE (Gulf Division)
Tampa Interocean S. S. Co.
Whitney Bldg., New Orleans, La.
Gulf ports to Orient and Dutch E. I.

***Passenger Services.** Included in these services are the speedy passenger vessels of the United States Lines sailing from New York to principal European ports, also the American Merchant Lines ships which sail weekly between New York and London offering passenger accommodations at remarkably reasonable rates.*

For complete information on either freight or passenger services as to rates, ships, dates of sailing, etc., write to

AMERICAN REPUBLICS LINE
C. H. Sprague & Son, Inc.
33 Broad St., Boston, Mass.
North and South Atlantic ports to Brazil and River Plate ports, east coast of South America

YANKEE LINE
Rogers & Webb
110 State Street, Boston, Mass.
North Atlantic to German ports

TEXAS UKAY LINE
Texas Oceanic S. S. Co., Inc.
Cotton Exchange Bldg.
Galveston, Tex.
Texas to United Kingdom ports

ORIOLE LINES
Consolidated Navigation Co.
Citizens National Bank Building
Baltimore, Md.
North Atlantic ports to west coast of United Kingdom and Irish ports

SOUTHERN STATES LINE
Lykes Bros.-Ripley S. S. Co., Inc.
925 Whitney Central Building
New Orleans, La.
New Orleans and Texas ports to German and Holland ports

TEXAS MEDIT. LINE
Texas Oceanic S. S. Co., Inc.
Cotton Exchange Bldg.
Galveston, Tex.
Texas to Mediterranean ports

TEXAS STAR LINE
Lykes Bros.-Ripley S. S. Co., Inc.
925 Whitney Central Building
New Orleans, La.
Texas to French and Belgian ports

UNITED STATES LINES
45 Broadway, New York City
Passenger, mail, freight services to England, Ireland, France and Germany

*Accommodations available for a limited number of passengers.

UNITED STATES SHIPPING BOARD

Merchant Fleet Corporation

WASHINGTON, D. C.

Generated on 2024-09-12 14:20 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Pipe, Brass and Copper
Foster Wheeler Corp.

Pipe Connections, Scupper,
Shenango-Penn Mold Co.

Pipe Fittings
Atlas Valve Co.
Dart Mfg. Co.

Pipe Flanges
(See Flanges)

Pipe Joint Compounds
Dixon Crucible Co., Joseph
Smooth-On Mfg. Co.

Pipe Signal Wrought Iron
Reading Iron Co.

Pipe, Steel
American Spiral Pipe Works
National Tube Co.

Pipe Unions
Atlas Valve Co.
Lunkenheimer Co., The

Pipe, Wrought Iron
Reading Iron Co.

Planers (Metal Working)
Cleveland Pneumatic Tool Co.

Plates, Boiler, Firebox, Etc.
Bethlehem Steel Co.

Plates Steel Floor
American Pressed Steel Co.

Pneumatic Drills
(See Pneumatic Tools)

Pneumatic Hammers
(See Pneumatic Tools)

Pneumatic Riveters
Ingersoll-Rand Co.

Pneumatic Separators
Griscom-Russell Co.

Pneumatic Tools
Cleveland Pneumatic Tool Co.
Ingersoll-Rand Co.

Presses
(See Hydraulic Presses)

Professional Cards
Barraja-Frauenfelder & Co.
Chapman & Co., O. C.
Cox & Stevens
Donnelly, Wm. J.
Dyson, Chas. W.
Ewertz, Eric H.
Farley & Co., Edward P.
Ferris, Theodore
Ford, Louis B.
McQuilling, T. A
Morrell, Robert W.
Nord, Nils F.
Sharp, Geo. G.
Stein, Wm. Morrison
Thayer, Horace Holden
Watts, J. Murray
Wells, Inc., John H.

Projectors
(See Searchlights)

Propeller Shafts
(See Shafting)

Propeller Wheels
Bethlehem Shipbldg. Corp.
Hyde Windlass Co.
Kearfott Engineering Co., Inc.

Propellers, Contra.
Bethlehem Steel Co.

Pumps and Pumping Machinery
Bethlehem Steel Co.
Blackmer Pump Co.
Coen Co., Inc.
Cooke Seal Ring
Davidson Co., M. T.
De Laval Steam Turbine Co.
Fairbanks-Morse & Co.
Griscom-Russell Co.
Hyde Windlass Co.
Ingersoll-Rand Co.
Kearfott Engineering Co.
Nash Engineering Co.
Warren Steam Pump Co.
Waterous Company
Westinghouse Electric & Mfg. Co.
Wheeler Mfg. Co., C. H.
Worthington Pump & Machinery Corp.

Pumps
Fairbanks-Morse & Co.
Hill Diesel Engine Co.
Ingersoll-Rand Co.
Nash Engineering Co.
Sands & Son Co., A. B.
Waterous Company

Pumps, Ball Bearing
Fairbanks-Morse & Co.
Nash Engineering Co.
Waterous Company

Pumps, Bilge
Fairbanks-Morse & Co.
Ingersoll-Rand Co.

Pumps, Boiler Feed
Fairbanks-Morse & Co.
Ingersoll-Rand Co.

Pumps, Centrifugal
Fairbanks-Morse & Co.
Hill Diesel Engine Co.
Ingersoll-Rand Co.
Nash Engineering Co.

Pumps, Circulating
Bethlehem Steel Co.
Cooke Seal Ring
Davidson Co., M. T.
De Laval Steam Turbine Co.
Foster Wheeler Corp.
Ingersoll-Rand Co.
Nash Engineering Co.
Warren Steam Pump Co.
Waterous Company
Westinghouse Elect. & Mfg. Co.
Wheeler Mfg. Co., C. H.
Worthington Pump & Machinery Corp.

Pumps, Dry Vacuum
Foster Wheeler Corp.
Ingersoll-Rand Co.

Pumps, Duplex Piston Pattern
Fairbanks-Morse & Co.
Worthington Pump & Machinery Corp.

Pumps, Fire Protection
Fairbanks-Morse & Co.
Ingersoll-Rand Co.
Nash Engineering Co.
Waterous Company
Worthington Pump & Machinery Corp.

Pumps, Fuel Oil
Bethlehem Steel Co.
Coen Co., Inc.
Davidson Co., M. T.
Ingersoll-Rand Co.
Nash Engineering Co.
Warren Steam Pump Co., Inc.
Waterous Company
Worthington Pump & Machinery Corp.

Pumps, Multistage Centrifugal
Fairbanks-Morse & Co.
Ingersoll-Rand Co.
Worthington Pump & Machinery Corp.

Pumps, Refrigeration
Fairbanks-Morse & Co.
Ingersoll-Rand Co.
Waterous Company
Worthington Pump & Machinery Corp.

Pumps, Rotary
Sands & Son Co., A. B.
Waterous Company

Pumps, Steam
Bethlehem Steel Co.
Fairbanks-Morse & Co.
Foster Wheeler Corp.
Ingersoll-Rand Co.
Worthington Pump & Machinery Corp.

Pumps, Vacuum
Bessemer Gas Engine Co.
Bethlehem Steel Co.
Ingersoll-Rand Co.
Nash Engineering Co.
Westinghouse Elect. & Mfg. Co.
Worthington Pump & Machinery Corp.

Punches, Boiler Maker
Cleveland Steel Tool Co.

Purifiers, Oil
De Laval Separator Co.
Griscom-Russell Co.
Sharples Specialty Co., The
Waterous Company

Pyrometers
Taylor Instrument Co.

Quadrant Davits
(See Davits)

Radio Apparatus
Electric Storage Battery Co.

Ranges, Electric
Edison Electric Appliance Co.
Westinghouse Electric & Mfg. Co.

Ranges, Galley
Edison Electrical Appliance Co.
Sands & Son Co., A. B.
Stamford Foundry Co., The

Reamers
Cleveland Pneumatic Tool Co., The
Ingersoll-Rand Co.

Reclaiming Systems for Oil
Sharples Specialty Co., The

Reducing Gears
(See Gears)

Reels for Hawsers
Roebling's Sons Co., J. A.

Refrigerating Machinery
Brunswick-Kroeschell Co.
Ingersoll-Rand Co.
Westinghouse Electric & Mfg. Co.
York Ice Machinery Corp.

Refrigerator Fronts
Jamison Cold Storage Door Co.

Regulators, Damper
Atlas Valve Co.

Regulators, Pressure
Atlas Valve Co.
Taylor Instrument Co.

Regulators, Temperature
Taylor Instrument Co.

Repairs, Marine
Bethlehem Shipbuilding Corp.
Capstaff Hunter Turbine Wks.
Manitowoc Shipbuilding Corp.
Newport News Dry Dock & Shipbuilding Co.
Todd Shipyards Corp.

Rheostats
General Electric Co.
Westinghouse Electric & Mfg. Co.

Rigging
(See Rope; also Wire Rope)

River Boats
(See Shipbuilders)

Rivet Busters, Rivet Clamps and Rivet Tongs
Cleveland Pneumatic Tool Co., The
Ingersoll-Rand Co.

Rivets
Burden Iron Co.

Rivet Sets
Cleveland Steel Tool Co.

Riveters
(See Pneumatic Tools)

Rods, Brass
Shonberg, Inc., I.

Rods, Welding
(See Welding Rods)

Roofing
Texas Co., The

Rope, Manila (Also See Wire Rope)
Columbian Rope Co.

Rope Transmission
Columbian Rope Co.

Rotary Blowers
(See Blowers)

Safety Devices
(See Life Saving Devices)

Salt and Fresh Water Cooling Pumps
Nash Engineering Co.

Salt and Fresh Water Sanitary Pumps
Nash Machinery Co.

Seamless Rolled Steel Rings
American Spiral Pipe Works

Seamless Steel Tubes
National Tube Co.

Searchlights
General Electric Co.
Sperry Gyroscope Co.

Sentinel Valves
(See Valves)

Separators, Air
Griscom-Russell Co.
Western Engineering Co.

Separators, Oil
Babcock & Wilcox Co.
Bethlehem Steel Co.
Sharples Specialty Co., The

Separators, Steam
Griscom-Russell Co.

Shaft Covering, Propeller
United States Rubber Co.

Shafting (Seamless Steel)
Kearfott Engineering Co.
National Tube Co.

Shim, Laminated
Laminated Shim Co.

Shipbuilders and Dry Dock Companies
Bath Iron Works
Bethlehem Shipbuilding Corp.
Charleston Dry Dock & Machine Co.
Manitowoc Shipbuilding Corp.
Morse Dry Dock & Repair Co.
New London Ship & Engine Co.
Newport News Dry Dock & Shipbuilding Co.
New York Shipbuilding Co.
Sun Shipbuilding & Dry Dock Co.
Todd Shipyards Corp.

Ship Brokers
Cox & Stevens
Farley & Co., Edward P.
Ferris, Theodore
Watts, J. Murray

Ship Compositions
Wailes Dove-Hermiston Corp.

Ship Construction
Ellis Channel System of Steel Hull Construction
Isherwood Co., J. W.
Manitowoc Shipbuilding Corp.

Ship Fittings, Supplies and Equipment
Griscom-Russell Co.

Ship Glue
(See Glue)

Ship Operators
Hamburg-American Line.
U. S. Shipping Board

Ship Owners
U. S. Shipping Board

Ship Repairs
(See Dry Docks and Marine Railways)

Ship Stabilizers
Sperry Gyroscope Co.

Shipyards
(See Shipbuilders)

Shipyard Cranes
(See Cranes)

Shipyard Whirlers
(See Cranes)

Shop Cranes
(See Cranes)

Signalling Apparatus
Nord, Nils F.

Signals, Air Hand, Steam
Nord, Nils F.

Silencers, Marine Engine
Maxim Silencer Co., The

Slings, Wire Rope
Roebling's Sons Co., J.

Stacks, Steel (Boiler)
Griscom-Russell Co.

Staybolt Iron
Bethlehem Steel Co.
Burden Iron Co.
Reading Iron Co.

Staybolts
Burden Iron Co.

Steam Engines
(See Engines)

Steam Gages
Ashton Valve Co.
Lunkenheimer Co., The

Steam Hoists
(See Hoisting Engines)

Steam Hose
Ingersoll-Rand Co.

Steam Pumps
(See Pumps)

Steam Traps
Griscom-Russell Co.

Steam Turbines
Bethlehem Shipbldg. Corp.
Capstaff Hunter Turbine Wks.
De Laval Steam Turbine Co.
General Electric Co.
Kearfott Engineering Co.
New York Shipbuilding Co.
Sturtevant Co., The B. F.
Westinghouse Electric & Mfg. Co.

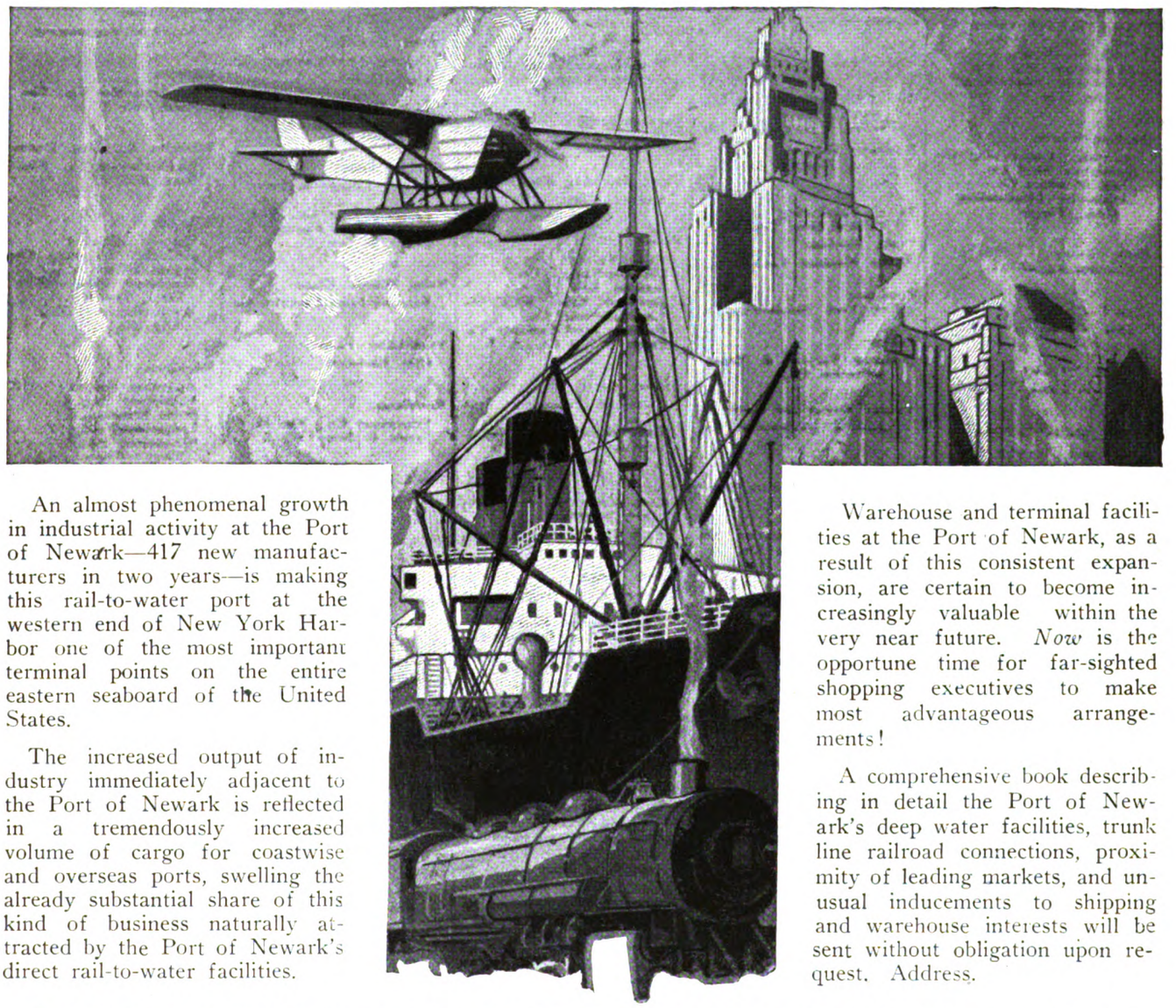
Steam Turbine Dynamos
De Laval Steam Turbine Co.
General Electric Co.
Kearfott Engineering Co.
Westinghouse Electric & Mfg. Co.

Steam Signals & Whistles
Nord, Nils F.

Steamship Companies
Hamburg-American Line.
U. S. Shipping Board

Generated on 2024-09-12 14:53 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

An Increasingly Important Terminal for Inter-Coastal Steamship Lines!



An almost phenomenal growth in industrial activity at the Port of Newark—417 new manufacturers in two years—is making this rail-to-water port at the western end of New York Harbor one of the most important terminal points on the entire eastern seaboard of the United States.

The increased output of industry immediately adjacent to the Port of Newark is reflected in a tremendously increased volume of cargo for coastwise and overseas ports, swelling the already substantial share of this kind of business naturally attracted by the Port of Newark's direct rail-to-water facilities.

Warehouse and terminal facilities at the Port of Newark, as a result of this consistent expansion, are certain to become increasingly valuable within the very near future. *Now* is the opportune time for far-sighted shopping executives to make most advantageous arrangements!

A comprehensive book describing in detail the Port of Newark's deep water facilities, trunk line railroad connections, proximity of leading markets, and unusual inducements to shipping and warehouse interests will be sent without obligation upon request. Address.

DEPARTMENT OF PUBLIC AFFAIRS—NEWARK, NEW JERSEY, U. S. A.

PORT NEWARK

"Where Railways, Waterways, Highways and Airways Meet"

Generated on 2024-09-12 15:00 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Steel Castings
(See Castings, Steel)

Steel Pipe
(See Pipe, Steel)

Steel Shafting
(See Shafting)

Steering Engines
American Engineering Co.
Bethlehem Steel Co.
Hyde Windlass Co.
Kearfott Engineering Co.
Lidgerwood Mfg. Co.
Manitowoc Shipbuilding Corp., The

Steering Gears
American Engineering Co
Bethlehem Shipbldg. Corp.
Hyde Windlass Co.
Lidgerwood Mfg. Co.
Manitowoc Shipbuilding Corp. The

Steering Wheels
American Engineering Co.
Bethlehem Steel Co.
Hyde Windlass Co.
Manitowoc Shipbuilding Corp., The

Stills, Water
Griscom-Russell Co.

Stop Cocks
(See Valves)

Storage Batteries
(See Batteries, Storage)

Stoves, Cabin Heating
Stamford Foundry Co.

Superheaters
(See Marine Superheaters)

Superheater Tubes
National Tube Company

Surface Condensers
Capstaff Hunter Turbine Wks.
Davidson Co., M. T.
Ingersoll-Rand Co.
Wheeler Mfg. Co., C. H.
Worthington Pump & Machinery Corp.

Switches and Switchboards
Westinghouse Elec. & Mfg. Co.
Worthington Pump & Machinery Corp.

Tachometer, Magneto
Weston Electrical Instrument Corp.

Tail Shafts
(See Shafting)

Tank Gages
Pneumercator Co.

Tank Gages, Oil Storage
Pneumercator Co.

Tank Pumps
Davidson Co., M. T.
Ingersoll-Rand Co.
Warren Steam Pump Co.

Tanks, Copper, Galvanized Iron
Griscom-Russell Co.

Tanks, Seamless
National Tube Co.

Telemotors—Electric and Hydraulic
American Engineering Co.
Hyde Windlass Co.

Telephone and Telegraph Apparatus
Electric Storage Battery Co.

Thermometers
Taylor Instrument Co.

Thermostats
Atlas Valve Co.
Taylor Instrument Co.

Tiller Rope
Roebling's Sons Co., J. A.

Timber
McKenna, Inc., J. F.

Tile, Cork, Composition, Linoleum, Rubber
Bonded Floors Co., Inc.

Toasters, Electric
Edison Electric Appliance Co.

Tools, Fabricating
Cleveland Steel Tool Co.

Tools, Machine
(See Machine Tools)

Towboats
New York Shipbuilding Co.

Towing
Moran Towing & Transportation Co.

Towing Hooks and Cocks
American Engineering Co.

Towing Lines
(See Rope and Wire Rope)

Towing Machines
American Engineering Co.
Lidgerwood Mfg. Co.

Transmission Rope
(See Rope)

Traps
(See Steam Traps)

Traveling Cranes
(See Cranes)

Trucks, Industrial
Electric Storage Battery Co.

Tube Cleaners
(See Boiler Flue Cleaners)

Tubes
(See Boiler Tubes; also Condenser Tubes)

Tubing, Brass and Copper
Foster Wheeler Corp.

Tubing, Seamless Steel
National Tube Co.

Tugs
(See Shipbuilders)

Turbines
(See Steam Turbines)

Turbo-Generators
New York Shipbuilding Co.

Turnbuckles and Other Wire Rope Accessories
American Cable Co., The
American Engineering Co.

Twine (See Rope, also Cordage)
Columbian Rope Co.

Unions
(See Pipe Fittings)

Urn Heaters
Edison Electric Appliance Co.

Vacuum Gauges
(See Gauges, Steam)

Vacuum Pumps
Bethlehem Steel Co.
Davidson Co., M. T.
Ingersoll-Rand Co.
Nash Engineering Co.
Warren Steam Pump Co.
Westinghouse Electric & Mfg. Co.
Wheeler Mfg. Co., C. H.
Worthington Pump & Machinery Corp.

Vacuum Traps
Griscom-Russell Co.

Valve Reseating Machines
Leavitt Machine Co.

Valves
Atlas Valve Co.
Griscom-Russell Co.
Jenkins Bros.
Jerguson Valve Mfg. Co.
Lunkenheimer Co.
Reading Steel Castings Co.
Sands & Son Co., A. B.

Valves, Air
Cleveland Pneumatic Tool Co.
Lunkenheimer Co., The
Reading Steel Castings Co., Inc.

Valves, Ammonia and Carbon Dioxide
York Ice Machinery Corp.

Valves, Angle
Cleveland Pneumatic Tool Co.
Lunkenheimer Co., The
Reading Steel Castings Co.

Valves, Back Pressure
Griscom-Russell Co.

Valves, Blow-Off
Lunkenheimer Co., The
Reading Steel Castings Co.

Valves, By-Pass
Griscom-Russell Co.
Lunkenheimer Co., The
Reading Steel Castings Co.

Valves, Cast Steel
Lunkenheimer Co., The
Reading Steel Castings Co.

Valves, Check, Brass and Iron
Lunkenheimer Co., The
Reading Steel Castings Co.
Sands & Son Co., A. B.

Valves, Float
Atlas Valve Co.

Valves, Gate—Brass and Iron
Lunkenheimer Co., The
Reading Steel Castings Co.

Valves, Globe—Brass and Iron
Lunkenheimer Co., The
Reading Steel Castings Co.

Valves, Governor
Atlas Valve Co.

Valves, Lubricating
Dart Mfg. Co.

Valves, Pump
Shonberg, Inc., I

Valves, Reducing
Atlas Valve Co.
Lunkenheimer Co., The

Valves, Regulating
Atlas Valve Co.
Sands & Son Co., A. B.

Valves, Relief
Atlas Valve Co.
Lunkenheimer Co., The

Valves, Safety
Lunkenheimer Co., The

Valves, Stop
Reading Steel Castings Co.

Valves, Three-way
Griscom-Russell Co.

Valves—Water
Jerguson Gage & Valve Co.
Lunkenheimer Co., The
Reading Steel Castings Co.
Sands & Son Co., A. B.

Valve Wheels, Chain
Reading Steel Castings Co.

Ventilating Fans
(See Blowers)

Ventilators
Sturtevant Co., The B. F.
Sands & Son Co., A. B.

Ventilating Sets
Sturtevant Co., The B. F.

Vertical Pumps
(See Pumps)

Vessel Brokers
(See Ship Brokers)

Washers, Cone
Walker & Co., Ltd., James

Water Closets, Marine
(See Marine Plumbing)

Water Columns
Jerguson Gage & Valve Co.
Lunkenheimer Co., The
National Tube Co.

Water Gages and Alarms
Jerguson Gage & Valve Co.
Lunkenheimer Co., The

Water Purifying Apparatus
Griscom-Russell Co.

Water Treatment, Boiler
Filtrators Company, The

Wax, Linoleum
Bonded Floors Co., Inc.

Welding Acetylene
Capstaff Hunter Turbine Wks.

Welding Fluxes
(See Flux, Welding)

Welding Thermit
(See Thermit Welding)

Welding—Electric
Capstaff Hunter Turbine Wks.
General Electric Co.
Westinghouse Elec. & Mfg. Co.

Welding Metals
(See Welding and Cutting Apparatus and Supplies)

Welding Wire
Roebling's Sons Co., J. A.

Wharf Cranes
(See Cranes)

Wharf Drops
American Engineering Co.

Whistles
Lunkenheimer Co., The
Nord, Nils F.

Whistles, Air, Fog, Steam
Lunkenheimer Co., The
Nord, Nils F.

Winches
(See Windlasses)
Bethlehem Shipbldg. Corp.
Ingersoll-Rand Co.
Manitowoc Shipbuilding Corp., The
Westinghouse Elec. & Mfg. Co.

Windlasses
American Engineering Co.
Bethlehem Steel Co.
Hyde Windlass Co.
Lidgerwood Mfg. Co.
Manitowoc Shipbuilding Corp., The
Westinghouse Elec. & Mfg. Co.

Windows, Cold Storage
Jamison Cold Storage Door Co.

Windows, Ship
Kearfott Engineering Co.

Windscoops
Kearfott Engineering Co.

Wireless Apparatus
(See Radio Apparatus)

Wire Cables, Rope and Accessories
Roebling's Sons Co., J. A.

Wiring Devices
(See Marine Wiring Devices)

Woodworking Machinery
Cleveland Pneumatic Tool Co.
Ingersoll-Rand Co.

Wrecking Cables
Columbian Rope Co.

Wrecking Pumps
Davidson Co., M. T.
Ingersoll-Rand Co.
Warren Steam Pump Co.

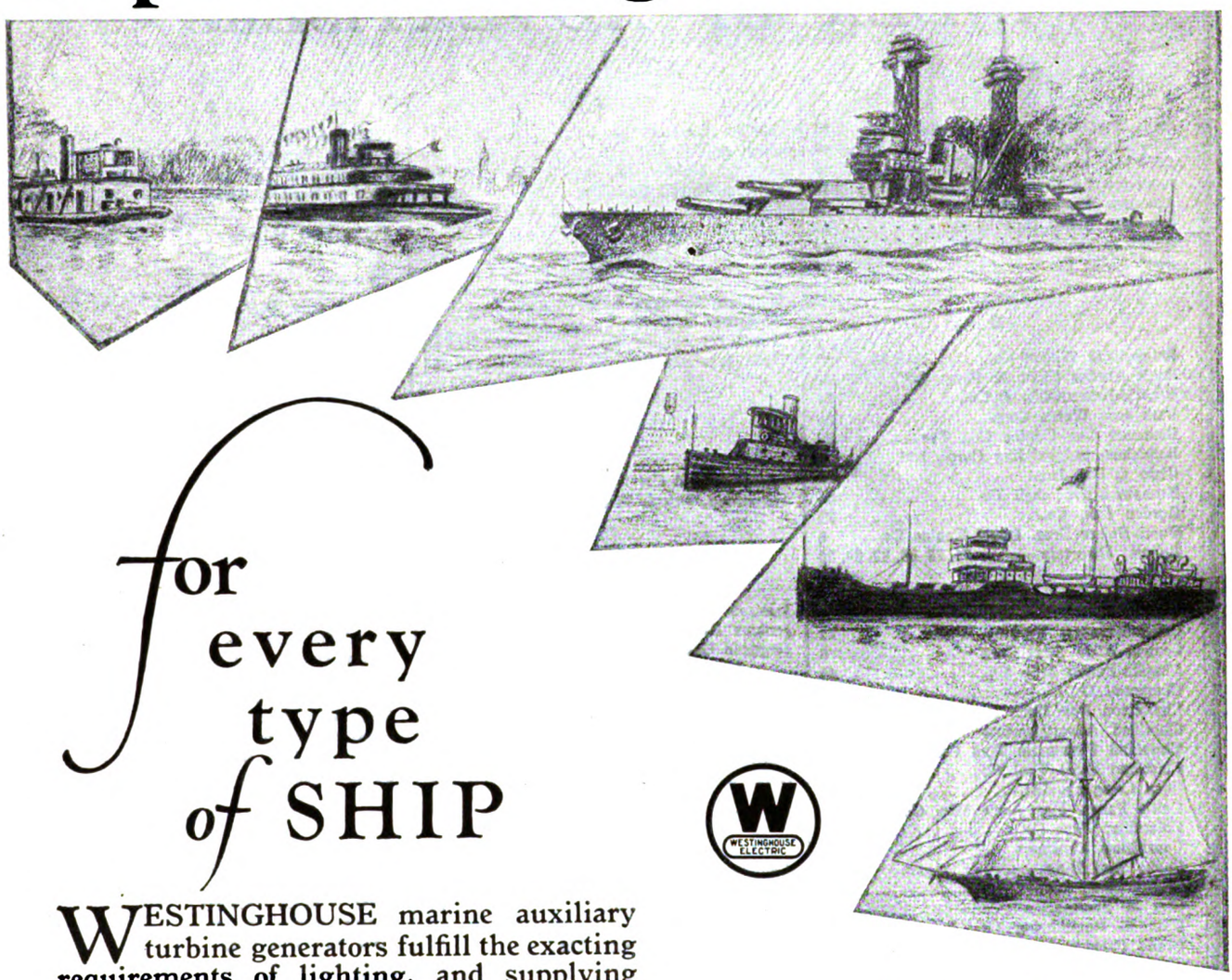
Wrenches
Roebling's Sons Co., John A.

Yacht Brokers
(See Ship Brokers)

Yachts
(See Shipbuilders)

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

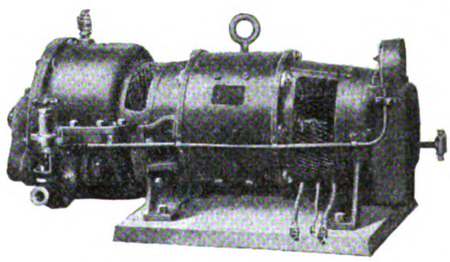
Dependable Light and Power



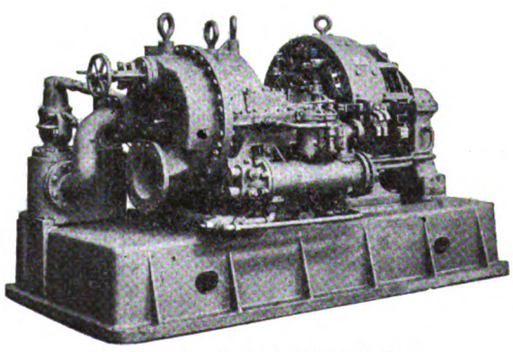
for every type of SHIP

WESTINGHOUSE marine auxiliary turbine generators fulfill the exacting requirements of lighting, and supplying power for auxiliaries on vessels of every type. They are simple and dependable. The generator windings are impregnated and treated to resist harmful effects of oil and salt water moisture. All other parts, subject to corrosion, are made non-corrodible in order to meet the severe conditions of marine service.

Westinghouse was one of the pioneers in the development of this class of apparatus, and during the last fifteen years has equipped more than five hundred vessels with auxiliary turbine generators ranging in capacity from 1.5 kw. to 500 kw.



15 Kw. Turbine Generator Unit



200 Kw. Turbine Generator Unit

Westinghouse Electric & Manufacturing Company
South Philadelphia Works Philadelphia, Pa.
Sales Offices in all Principal American Cities
Service Stations in all Principal American Ports

Westinghouse

T 30082

Generated on 2024-09-12 14:22 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

INDEX OF ADVERTISERS

A

Alfit Manufacturing Co., Inc. 73
American Bridge Co. 48
American Engineering Co. 48
American La France & Foamite Corp. ... 36
American Pressed Steel Co. 64
American Spiral Pipe Works 45
American Welding Co., The 49
Atlas Valve Co. 64

B

Babcock & Wilcox Co. 49
Baldt Anchor Chain & Forge Co. 27
Barraja-Frauenfelder & Co., J. 74
Bath Iron Works Corp. 50
Bessemer Gas Engine Co., The 22
Bethlehem Shipbuilding Corp., Ltd. 2
Blain & Co., Inc. 64
Brunswick-Kroeschell Co. 64
Burden Iron Co. 29
Busch-Sulzer Bros. Diesel Engine Co. 8
Buyers' Directory 76, 78, 80, 82, 84, 86

C

Capstaff-Hunter Turbine Works 71
Central Alloy Steel Corp. 6
Chaplin-Fulton Mfg. Co. 65
Chapman, O. C. 74
Charleston Dry Dock & Machine Co. ... 73
Classified Advertisements 75
Cleveland Pneumatic Tool Co., The 50
Cleveland Steel Tool Co. 65
Coen Company, Inc. 51
Colt's Patent Fire Arms Mfg. Co. 63
Columbian Rope Co. 77
Consulting Engineers 74, 75
Cooke Seal Ring 66
Cook's Sons, Adam 65
Cox & Stevens 74
Crandall Engineering Co. 65
Crane Packing Co. 30

D

Dart Mfg. Co., E. M. 66
Davidson Co., M. T. 66
De Laval Separator Co., The 12, 13
De Laval Steam Turbine Co. 51
Diamond Power Specialty Corp. 79
Diehl Manufacturing Co. 34
Dixon Crucible Co., Joseph 66
Donnelly, William T. 74
Dyson, Chas. W. 74

E

Edison Electric Appliance Co., Inc. 23
Electric Storage Battery Co., The 21
Ellis Channel System, Inc. 25
Engberg's Electric & Mechanical Works 52
Ewertz, Eric H. 74

F

Fairbanks-Morse & Co. 14, 15
Farley & Co., Edward P. 74
Ferris, Theodore E. 74
Filtrators Company 67
Ford, Louis R. 74
Foster Wheeler Corp. 52
Frick Company 67
Fulton Iron Works Co. 31

G

General Electric Co. 10, 11
Getty & Co., Inc., H. S. 44
Goodrich Rubber Co., B. F., The 43
Griscom-Russell Co., The 53

H

Hamburg-American Line 67
Haskelite Mfg. Co. 67
Hill-Diesel Engine Co. 68
Hyde Windlass Co. 53

I

Ingersoll-Rand Co. 46
Isherwood, Joseph W., Sir 54

J

Jamison Cold Storage Door Co. 63
Jenkins Bros. 26
Jerguson Gage & Valve Co. 68

K

Kearfott Engineering Co. 54
Kidde & Co., Inc., Walter 5

L

Laminated Shim Co., Inc. 55
Leavitt Machine Co., The 59
Lidgerwood Mfg. Co. 41
Linde Air Products Co. 17
Lombard Governor Co., The 72
Lunkenheimer Co., The 58

M

McIntosh & Seymour Corp. 18
McKenna, Inc., John F. 68
McQuilling, T. A. 74
Manitowoc Shipbuilding Corp., The 68
Maxim Silencer Co., The 55
Moran Towing & Transportation Co., Inc. 7
Morrell, Robert W. 74
Morse Dry Dock & Repair Co. 3

N

Nash Engineering Co., The 24
National Lead Co. 38
National Malleable & Steel Castings Co. 39
National Tube Co. 37
Naval Architects 74, 75
New London Ship & Engine Co., The .. 42
Newport News Shipbuilding & Dry Dock Co. 20
New York Marine Engineering Co. 74
Nord, Nils F. 69

O

Oakite Products, Inc. 69

P

Pantasote Co., Inc. 69
Peabody Engineering Corp. 70
Pneumercator Co., Inc. 75
Port of Newark, The 85
Prest-O-Lite Co. 19
Professional Directory 74, 75

Q

Quaker City Rubber Co. 69

R

Reading Iron Co. 35
Roebling's Sons Co., John A. 70
Rohde & Sons Co., Chas. L. 70
Roto Co., The 73

S

Sands & Son Co., A. B. 72
Sharp, Geo. G. 74
Sharples Specialty Co., The 9
Shonberg, Inc., I. 71
Simmons-Boardman Publishing Co. 47
Smooth-On Mfg. Co. 59
Sperry Gyroscope Co. 81
Stamford Foundry Co., The 70
Standard Oil Co. of N. J. 57
Stein, Wm. Morrison 74
Stratford Oakum Co., Geo. 58
Sturtevant Co., B. F. 60
Sun Shipbuilding & Dry Dock Co. 89

T

Taylor Instrument Co. 57
Texas Company, The 32
Texas Nautical Academy 75
Thayer, Horace Holden 74
Todd Shipyards Corp. 33
Topping Brothers 56
Treiber Diesel Engine Co. 61

U

United States Rubber Co. 62
United States Shipping Board 83

V

Vacuum Oil Co. 90

W

Wailes Dove-Hermiston Corp. 73
Walker & Co., Ltd., James 71
Warren Steam Pump Co., Inc. 72
Waterous Company 72
Watts, J. Murray 74
Wells, Inc., John H. 74
Western Engineering Corp. 56
Westinghouse Electric & Mfg. Co. 87
Weston Electrical Instrument Corp. 60
Wheeler Mfg. Co., C. H. 71
Winton Engine Co., The 28
Worthington Pump & Machinery Corp. .....Front Cover, 16

Y

York Ice Machinery Corp. 61

Generated on 2024-09-12 14:58 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

SUN SHIPBUILDING & DRY DOCK CO.

Shipyard and Main Office
Chester, Pa.

Finance Building
Philadelphia

816 Cunard Building
25 Broadway, New York

Ten large American vessels and one pleasure yacht are now equipped with American built ***Sun-Doxford Diesel Engines:***

M.S. Gulf of Venezuela
10,200 tons D. W.

M.S. East Indian
11,600 tons D. W.

M.S. Challenger
11,600 tons D. W.

M.S. Bidwell
10,200 tons D. W.

M.S. Aurora
10,200 tons D. W.

M.S. Benson Ford
12,000 tons D. W.

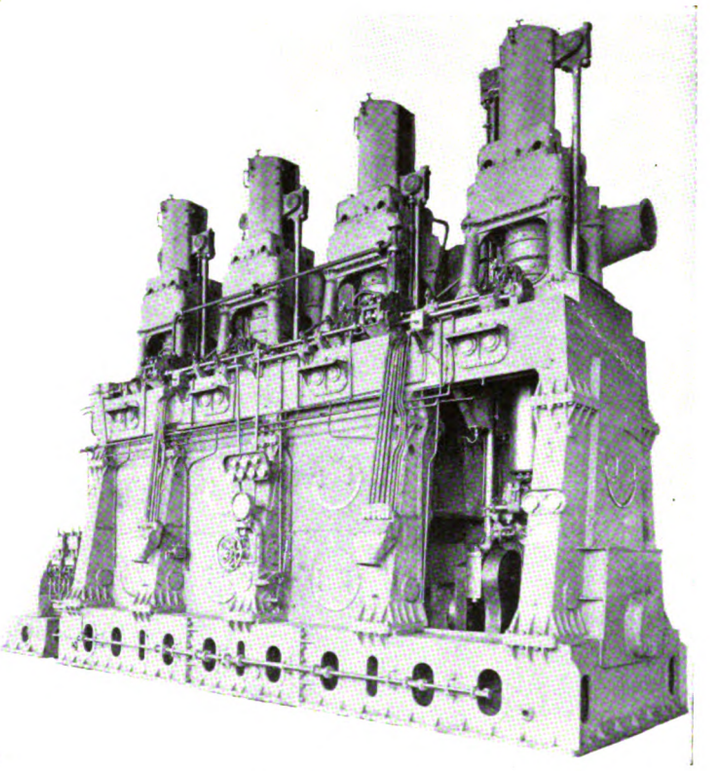
M.S. Henry Ford II
12,000 tons D. W.

M.S. Twin Screw Yacht Sialia
1500 H. P.

M.S. Sun Oil
13,500 tons D. W.

M.S.Mary Ellen O'Neil
17,120 tons D. W.

M.S. Sun
13,500 tons D. W.



Sole Licensees
Sun-Doxford Opposed-Piston Two Cycle Diesel Oil Engine

2

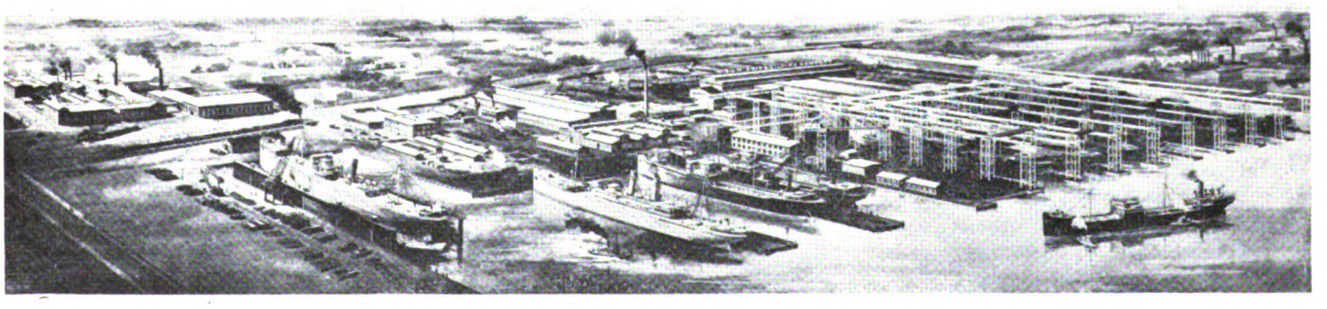
Floating Dry Docks

Capacity
11,000 Tons Each

Unlimited Facilities
for
Ship Repairs

IRON FOUNDERS

Castings up to 70,000 lbs.

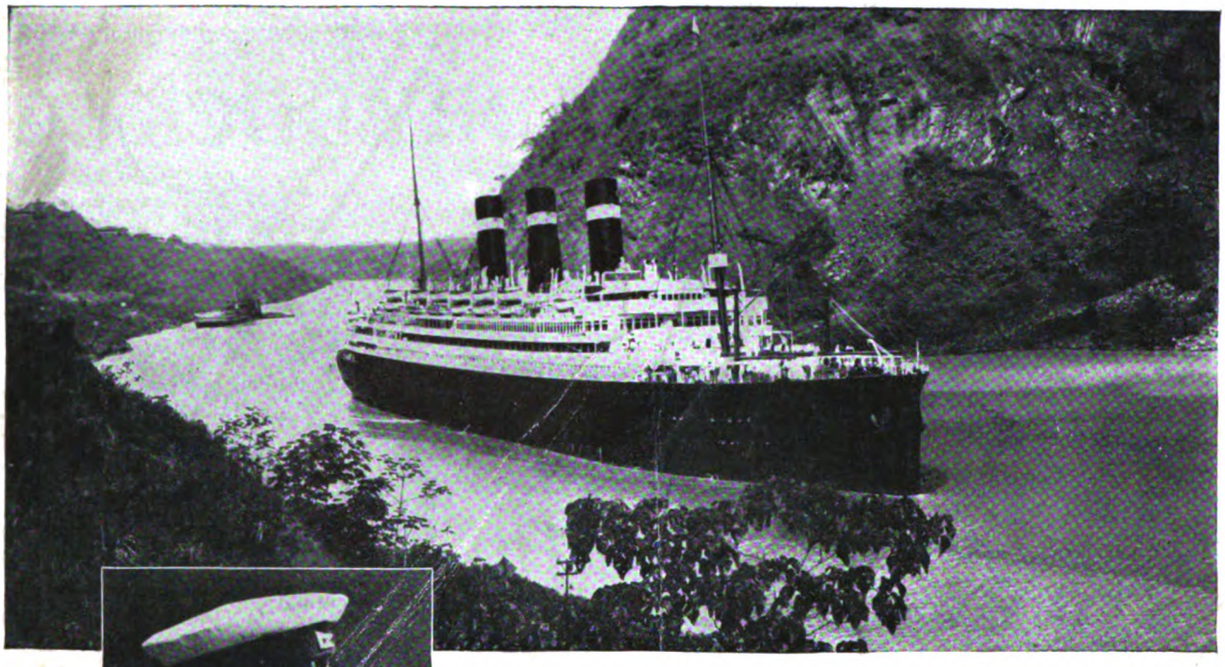


Shipyard and Dry Docks

Builders of High-Class Single and Twin Screw Passenger and Cargo Steam Vessels and Motor Ships, also Bulk Oil Tankers up to 600 Feet.

SHIP, ENGINE and BOILER BUILDERS, also REPAIRS

Generated on 2024-09-12 14:19 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



The *S. S. Belgenland* in the Culebra Cut, Panama Canal

J. Russell Mackay,
her Chief Engineer

A ship and an oil that go 'round the world

The *S. S. Belgenland* of the Red Star Line sails December 17 on a 4-months' cruise around the world. This triple-screw oil burner, with a gross tonnage of 27,200, has already made four successful cruises of this nature.

The *S. S. Belgenland's* engines, on this 26,680 mile voyage, will be under the supervision of J. Russell Mackay—and, as on previous cruises, will be lubricated by Gargoyle Marine Oils.

Chief Engineer Mackay is one of the many marine engineers who have learned by experience the practical economies of these high-grade Gargoyle lubricants.

These men know that Gargoyle Marine Oils save fuel, by lessening friction; save oil, by reducing oil consumption; save time, by minimizing repairs; and save money, by giving a longer engine life.

Gargoyle Marine Oils are available at each of the *Belgenland's* ports of call—and at several hundred others. They are available, in all, at more than 300 of the world's leading ports.

In each of these there is a Vacuum Oil representative. Familiar with every type of marine machinery—he is able and willing to cooperate with you on your own lubrication problems.

NOTE: On request we will be glad to send you, without obligation, our authoritative marine lubrication treatise: "Steamships with Reciprocating Engines," and "Turbine Propelled Steamships." Write for your copies to Marine Department, Vacuum Oil Company, 61 Broadway, New York City.

GARGOYLE

Marine Oils

A grade for each type of service

Vacuum Oil Company *Specialists in the manufacture of high-grade lubricants for every class of machinery Obtainable everywhere in the world* ***New York, U. S. A.***

Generated on 2024-09-12 14:52 GMT / https://hdl.handle.net/2027/mdp.39015013713352
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN